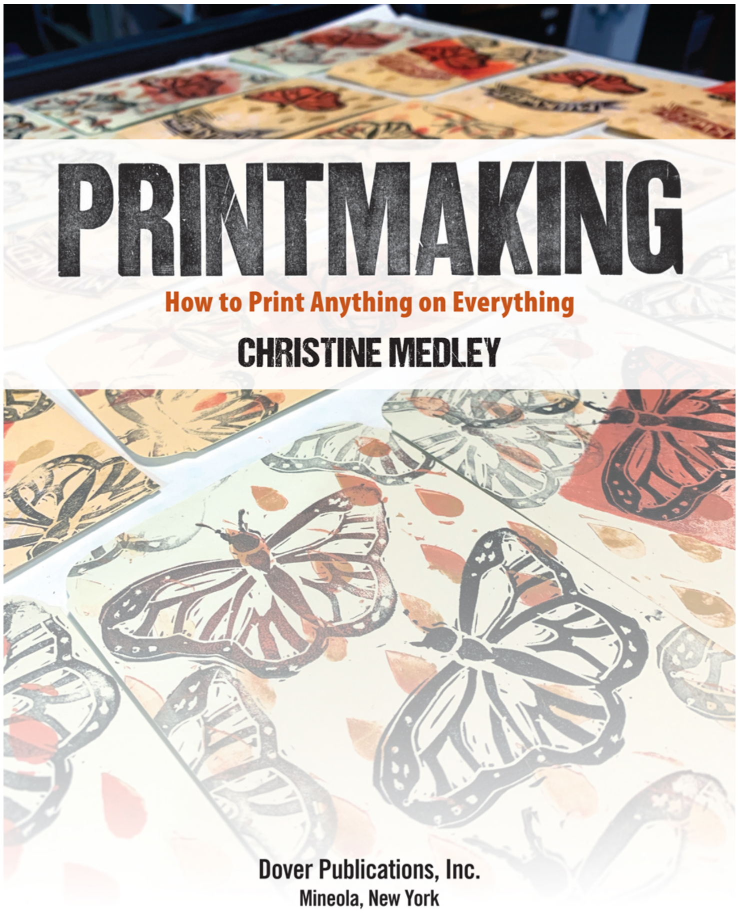
PRINTMAKING

How to Print Anything on Everything

- Block Printing
- Silk Screening
- Gel plates
- Solar plates

and more!

CHRISTINE MEDLEY



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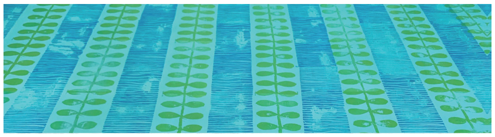

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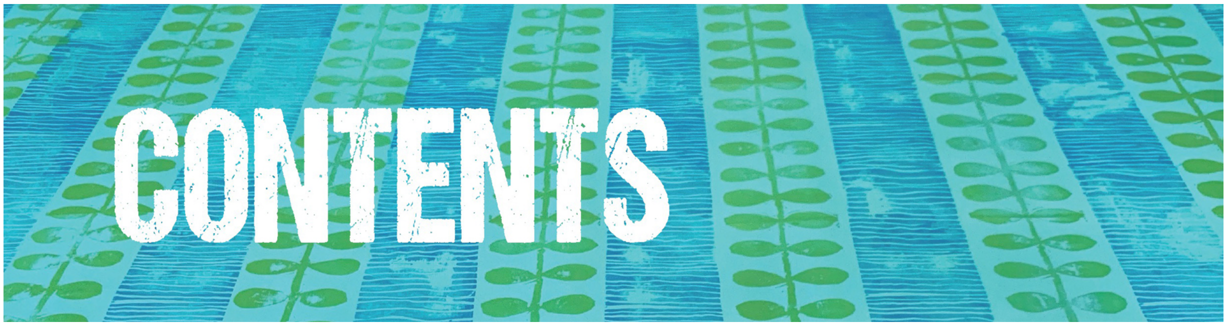

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FOREWORD

The Space Between

The only thing that matches Chris's talent is her ability to teach others. Chris showed me how printmaking develops artistic vision in a way nothing else can.

Printmaking is an accessible art, something anyone can do, yet even a veteran artist can't control every aspect of the process.

For beginners, that means they can make something really special without the years of practice some artistic disciplines require.

For the experienced artist, the process of printmaking will always present a challenge, because the artist can never control every aspect of the craft.

But with that loss of control, something wonderful happens. Printmaking has the ability to provide serendipity like no other artistic endeavor. Only film and the theater might compare.

The artist simply cannot control exactly the way the ink will lay, nor every detail of how the texture of the paper will react.

So it creates a gap of control. A space between the artist can't touch. And the beauty that happens within that space can be shocking.

In the world of computers where you can control every pixel, this process can be a revelation for the artist who has become accustomed to that level of control. I was trained in traditional media but became a designer working primarily on a computer for twenty years. Then I experienced personal tragedies and lost interest in creating art.

Printmaking allowed me to create once again. It was the perfect therapy, being easy to access yet endlessly challenging.

Seeing the surprises revealed, as I pulled away the paper, taught me that the greatest things in art—and in life—might just happen in the space we can’t control.

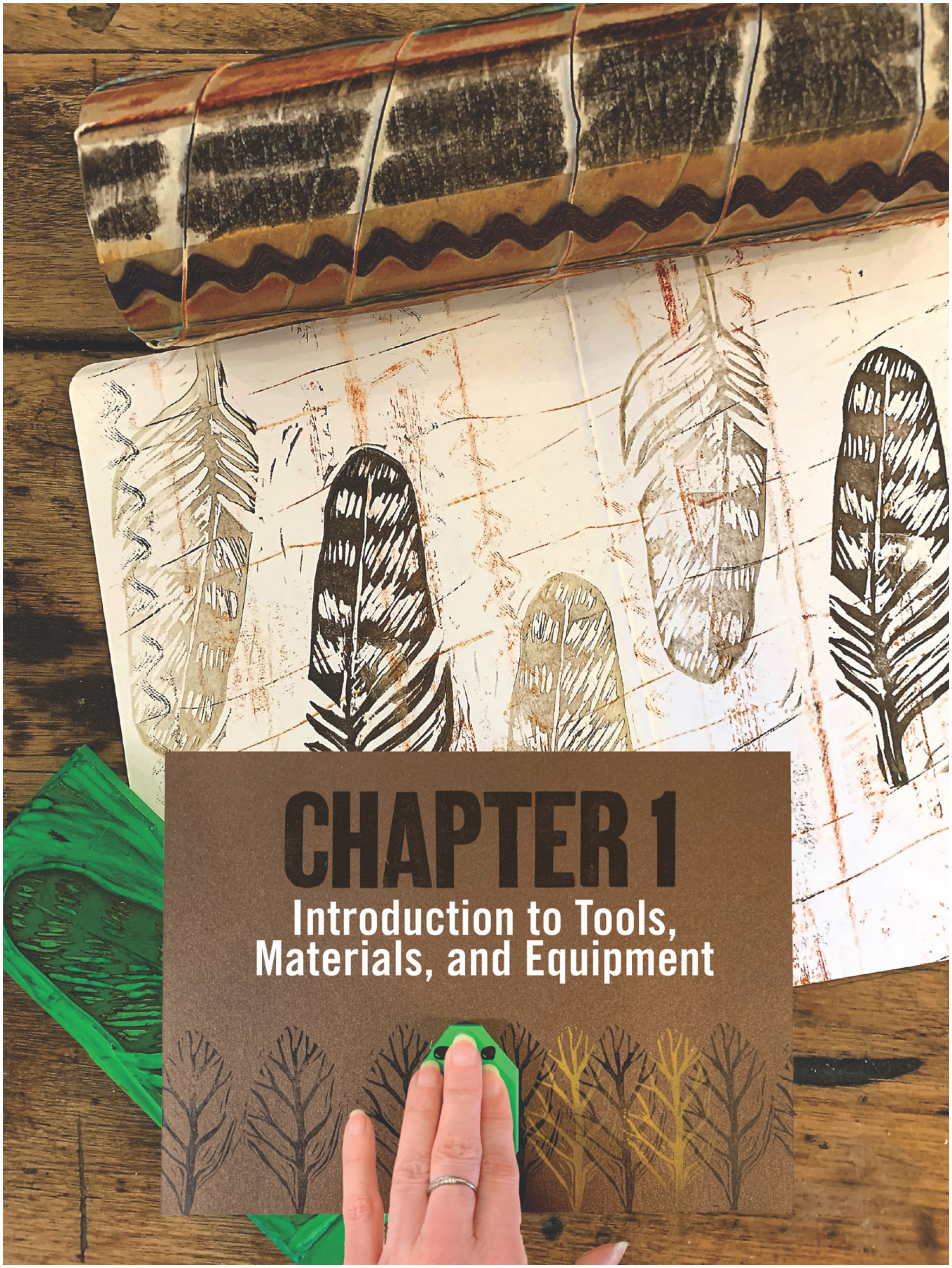
Getting comfortable with letting the good and the bad happen as it will has had a directly positive influence. It taught me on a deep level where words and thoughts can’t reach, that while I can’t control everything, beauty still exists.

You can imagine my debt to Chris for maintaining a studio open to the public and teaching me in her unique way.

As a student, I found Chris’s calm nature gave me plenty of space to create, yet when needed, she’d communicate pointed and confident instruction, knowledge born from a lifetime of consistent effort and boundless passion for the discipline.

It has been a privilege, Chris. Thank you.

Tunkhannock, Pennsylvania	— Jennifer Kozlansky
January 2020	Illustrator, Designer



CHAPTER 1

Introduction to Tools, Materials, and Equipment

Figure 1.1
Stars printed from a sliced star fruit

INTRODUCTION

Printmaking, Printmakers, and DIY

The maker movement is here and going strong—crafters, artisans, designers, inventors, artists, workshoppers, and DIYers (do-it-yourselfers), with or without artistic backgrouds, all creating, designing, upcycling, and making fun, original, decorative, and inspiring things. *Printmaking: How to Print Anything on Everything* is for anyone who wants to make. So why printmaking? Printmaking in a nutshell is about creating multiples and pressing images on to a wide range of surfaces and materials. It can be simple and direct with a seemingly magical result. The reward in printmaking is peeling back a sheet of paper to see what image has emerged. It is satisfying, surprising, and full of happy accidents. Printing on paper, textiles, and a variety of objects allows for the maker to print multiples to keep, give, and sell. It is process-oriented and allows for experimentation and invention. Just like following a recipe, you can follow the basic print process, but add your own style to taste.

Printmaking can be an easy and approachable process applied to a variety of projects, which makes it appealing to makers of all ages and backgrounds. The processes and projects in this book, starting from easy approaches and ending with more advanced techniques, do not require any experience or expensive equipment. To keep the project expenses low, household items and inexpensive materials available at the local crafts stores are used as much as possible.

In this chapter, a basic tools and processes introduction explains the types of printmaking and builds a foundation of terms with an overview of what is needed to make a print.

Chapter 2 addresses “Can I print with that?” This chapter will show you how to make different printmaking tools from household objects and low-cost materials for your “creative toolbox.” You also will learn how to set up your space and plan a print, along with some basic design direction. As you work through the project instructions in chapters 3, 4, and 5, you will be prompted to refer back to your creative toolbox.

The twelve projects in this book have wide appeal for all ages and skill levels and encourage experimentation, invention, and discovery. Do them alone, with friends, or in a group. Have fun and become a printmaker!

THE 4 TYPES OF

Making multiple copies of an image from a plate has been around since the ancient Chinese developed a printing process using woodcut. Woodcut remains a traditional method, along with alternative types of relief surfaces such as linoleum. Relief is the most common, most varied, and easiest method of printing. Although relief will be the primary focus of the twelve projects, we will do some screen printing projects too. The following are basic explanations of each of the four types of printmaking.

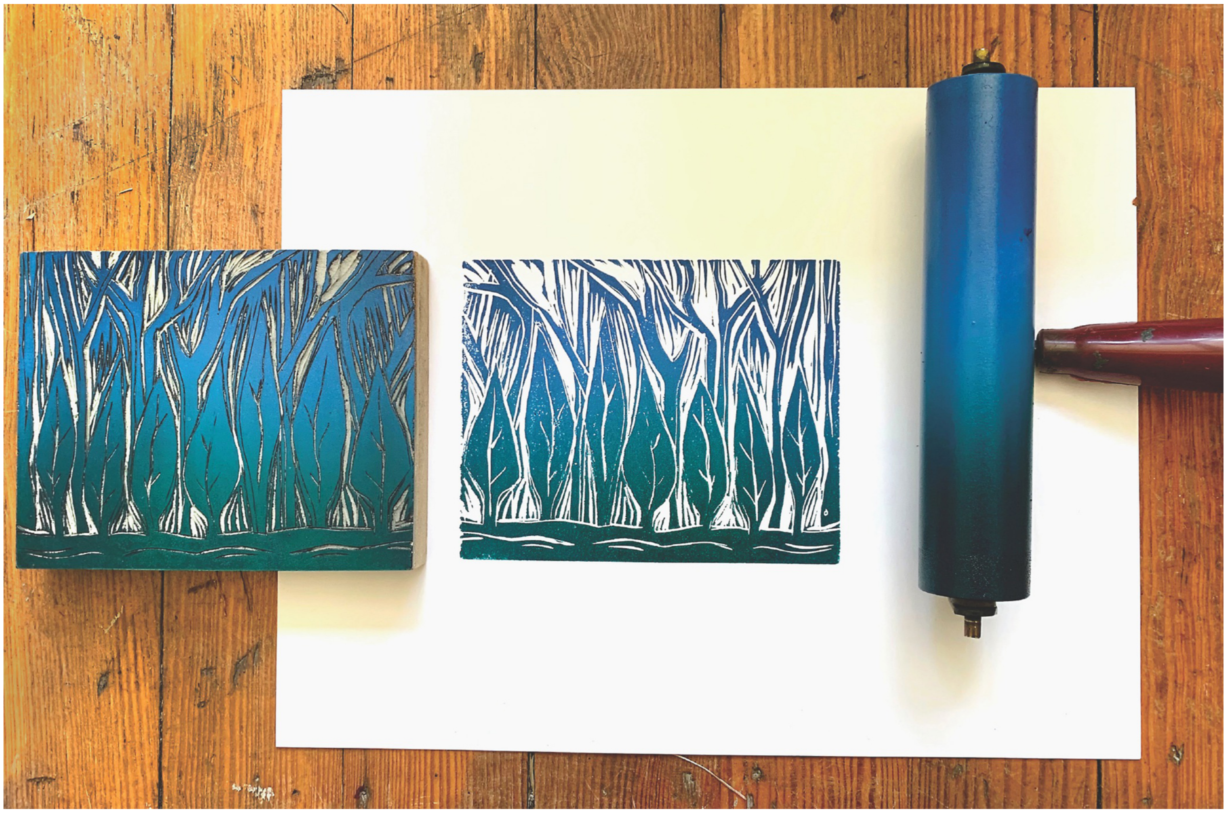


Figure 1.2 *This is a relief print, cut from a linoleum-mounted block with a rainbow roll.*

RELIEF

Relief or block printing refers to woodcut, linoleum cut, letterpress printing (metal and wood type), monoprinting, and solar/polymer plates. Relief plates have the image on the surface with the background removed, so only the surface image will print. The plate is prepared for printing by rolling ink on to the surface with a brayer. Most relief plates can be printed with the use of your hands or a simple tool like the back of a spoon or a flat disk, called a “baren.” (Figure 1.2)

PRINTMAKING

INTAGLIO

Intaglio refers to the image being below the surface of the plate. Line work and tonal images are etched with acid or engraved into metal plates where the ink is pushed into the deep lines and wiped off the surface. Etching requires a press in order to pull the ink out of the grooves on to dampened paper to get high-quality prints. Types of intaglio include etching, engraving, drypoint, mezzotint, and aquatint, all of which incise the image below the plate surface. (Figure 1.5)

SCREEN

Screen printing is a stenciled image on a fine silk or polyester screen where the ink is pushed through with a squeegee. Screen printing is used to print T-shirts, textiles, posters, signs, mugs, and many other commercial products. Serigraphy is another term for screen printing and pertains to the fine art prints made with the process. Stencils for screen printing can be painted on; cut from paper, acetate, freezer paper, or adhesive shelf liner; or used in a photographic process. (Figure 1.3)

LITHOGRAPHY

Lithography is the printing process based on the principle that oil and water do not mix. Stone lithography is the traditional fine art version, which requires a prepared smooth limestone (Figure 1.4), an acid etch, and a printing press. Commercial offset printing is based on lithography and utilizes photo negatives to create metal plates used on large presses to print magazines, newspapers, and all kinds of printed materials.

For your projects, you will explore and experiment with a variety of relief printing methods and stencil methods for screen printing. The following are the types of plates used for the twelve projects. Many items can be found at home; others you can buy at a local arts and crafts store.

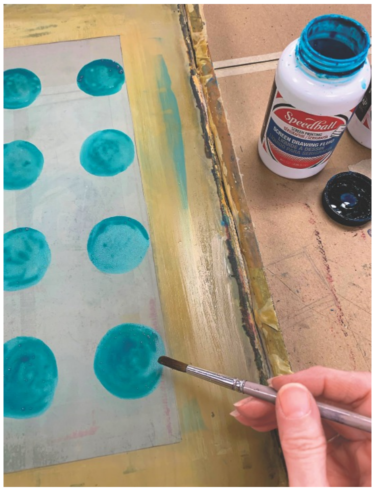


Figure 1.3 *Screen printing frame with painted stencil*

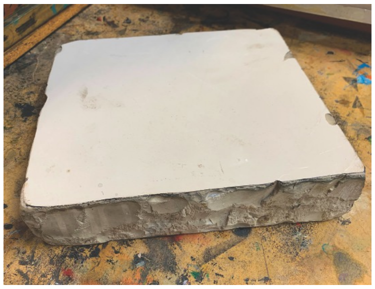


Figure 1.4 *Litho stone*

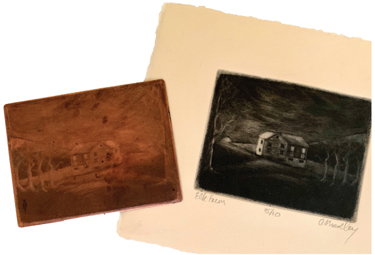


Figure 1.5 *Copper plate mezzotint is an example of intaglio.*

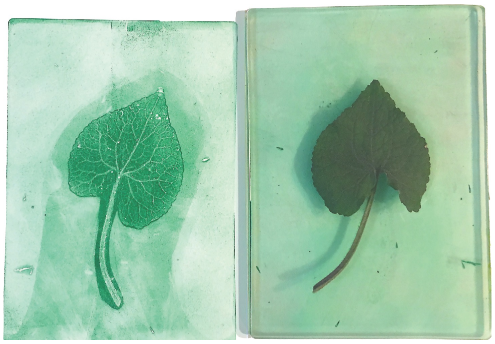


Figure 1.6
Gel plate monoprint created with a Speedball gel plate and Charbonnel Aqua Wash ink

PLATE TYPES

Linoleum Blocks

Battleship gray linoleum is the traditional plate for a “linocut” (short for linoleum cut). It comes mounted on a wood base or unmounted (Figure 1.7), allowing you to cut it into custom shapes. You can heat up linoleum blocks in the microwave (thirty seconds) or oven (250 degrees for five minutes) to soften the surface for easier cutting.

There are many alternate products that are easier to cut than battleship gray linoleum. Look for the following relief block alternatives online or at a hardware store.

- Easy or soft-cut relief blocks that come in colors like pink, white, and blue. The only downside to the soft plates are they may squish with hard printing pressure, which may slightly distort your image.
- There is an in-between block that offers a softer cut than linoleum but a harder surface than the soft cut. The harder block surface will yield crisp and precise lines.
- Sintra is a lightweight PVC foam board normally used for sign making and offers the ease of cutting into shapes and designs. (Figure 1.8)

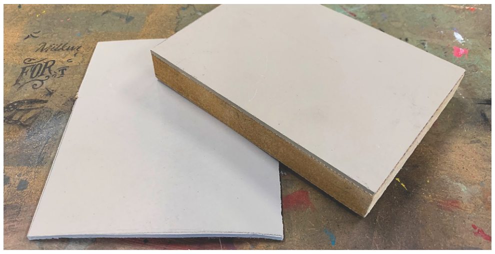


Figure 1.7 *Battleship gray linoleum, unmounted and mounted*

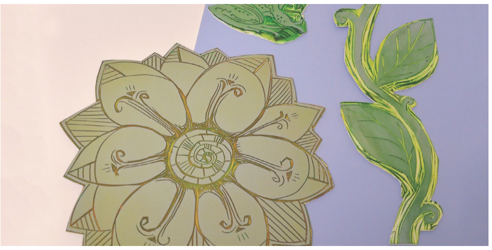


Figure 1.8 *Sintra and synthesis plates cut into shapes*

- Synthesis plates are a blue-colored board that can perform as relief or intaglio because you can carve it with a cutter or draw into it with a ballpoint pen. (Figure 1.8)
- Marine board is another PVC product that works for block printing.

Stamps

You can carve stamps out of plastic erasers (Figure 1.9), soft safety cut linocut blocks (which come in pink, blue, or white), and even potatoes. A collection of purchased rubber stamps such as letters or words is a good investment because lettering is challenging to cut out, as you have to do it backward—the most common and time-wasting mistake in relief printing.

Found Objects

Clean out your junk drawer and go through the vegetable drawer in your refrigerator, and you will find plenty of fun objects to print with for your projects.

- Produce. Carve stamps out of baking potatoes or print the natural design of a sliced lemon. Any produce that has an interesting pattern when cut can be printed. Try onions, star fruit, green peppers, citrus, and leaves like romaine lettuce or spinach. Avoid using hot peppers, as you could burn your hands from their oil.

- Corks, spools, combs, natural sponges, produce netting, bubble wrap, old keys, jewelry, twine, lace, and anything else that has an interesting texture or shape.
- Cardboard tubes with glued-on craft foam shapes, string, or rubber bands make for great pattern rollers for large-print projects like wrapping paper. Tubes from toilet paper rolls, paper towels, and printer paper rolls work well. Heavy-duty mailing tubes also could be used as pressure rollers (think rolling pins) to make impressions from the plate to the paper.

Foam

Craft foam or Styrofoam plates make for easy and safe printing for the novice or young printer. You can even use Styrofoam insulation.

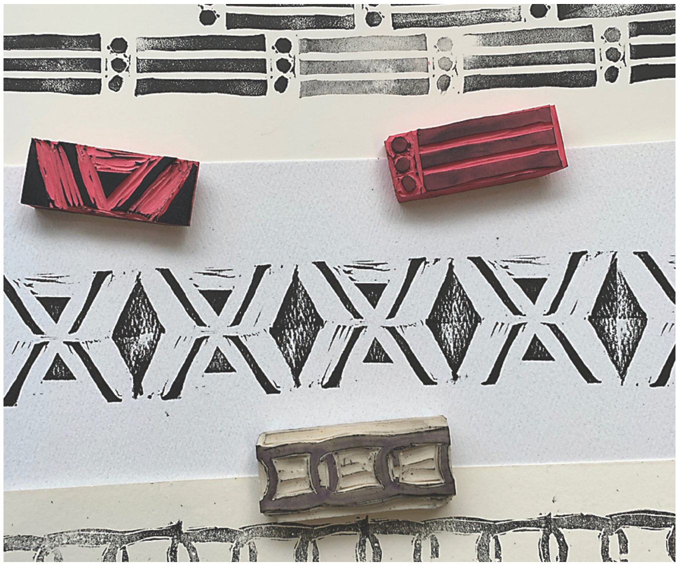


Figure 1.9 *Stamps cut from a plastic eraser with repeating pattern prints*

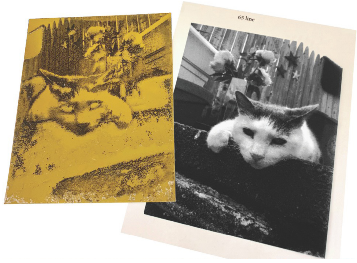
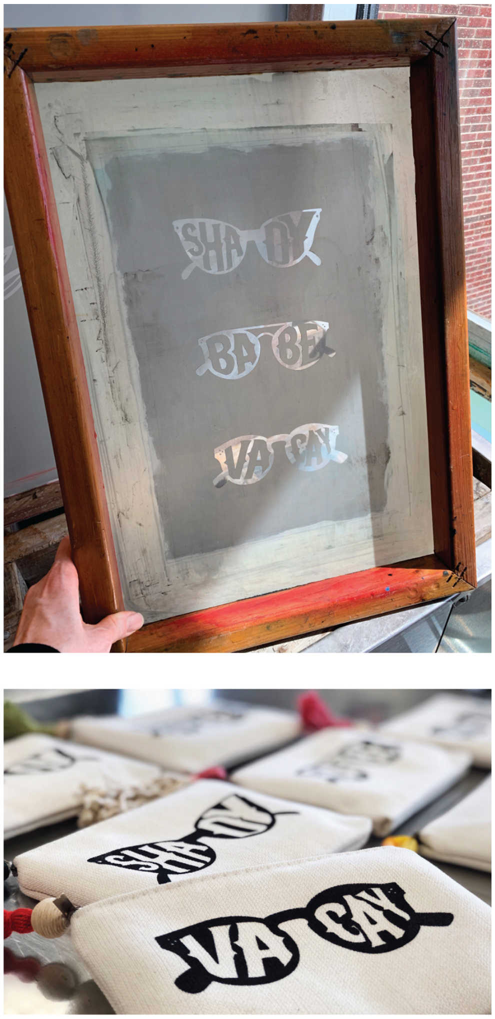


Figure 1.10 *Solar plate and transparency*


SHA DY
BA BE
VA CAY

Figures 1.11 & 1.12 *Screen with stencil designs printed separately on canvas pouches (Design by Maci Roos)*

Gelatin Plates

Great for monoprinting, these soft-surface plates allow for painterly and exploratory printing. Gel plates have been around for many years and are easily made with unflavored gelatin, water, and glycerine. Commercial gel plates are a relatively new product and mimic the qualities of gelatin, but do not contain gelatin and provide a superior printing surface. (Figure 1.6)

Solar Plates

These photo-sensitive plates allow you to reproduce any image created on a transparency, such as type, logos, and photos printed from your computer, or images drawn or painted in black, or objects placed on top of the plate, which create a silhouette. The plate has a photo-sensitive polymer layer on a metal base and uses the sun or UV light to expose it. This nontoxic process uses water to develop the plate. The resulting image can be used as a relief or intaglio plate. (Figure 1.10)

Screen Printing Frame

Screens for printing are available from a variety of sources and come in a number of sizes with different fabric meshes, from fine for art printing to a more open weave for fabric printing. Speedball makes a small ready-to-use screen or a screen printing kit, which includes the frame, squeegee, and ink, that can be easily found at a crafts store. (Figure 1.11)

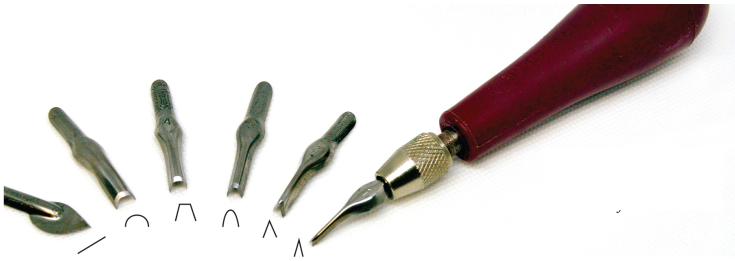


Figure 1.13 *Lino cutter handle with five blades and a knife*

CUTTING TOOLS

Carving Designs

To cut out a design for a block print, you will need a linoleum cutter, which is available as a set of different blade styles and a handle. Each blade has a different shape for carving out thin and thick lines or large areas. (Figure 1.13)

A typical working method is to begin with the smaller size V-shaped blades to define and outline the detail areas. (Figure 1.14) Work your way through larger blades for thicker lines, and end with a U-shaped scoop blade to clear out the background. We will go into more detail on how to carve a design in chapter 2.

Utility and X-Acto knives are also useful for trimming down unmounted plates and cleaning up image details and edges.

Trimming Paper

To cut paper to size, you will need any one of the following:

- metal cork-backed ruler (cork keeps the ruler from slipping);
- utility or X-Acto knife;
- paper cutter or rotary paper cutter.

Any of these methods will give you a perfectly straight clean paper edge. It is also helpful to have a cutting mat, so as not to damage tabletops or break your blade tip.

Tearing paper against the edge of a metal ruler will give you a soft edge, mimicking a deckled edge. (Figure 1.15) To tear thin paper, use a small brush to wet the tear line and then pull the paper apart. This will yield a soft deckle-like edge too.

Scissors are not recommended to cut paper because it is nearly impossible to keep the outside paper edge perfectly straight.

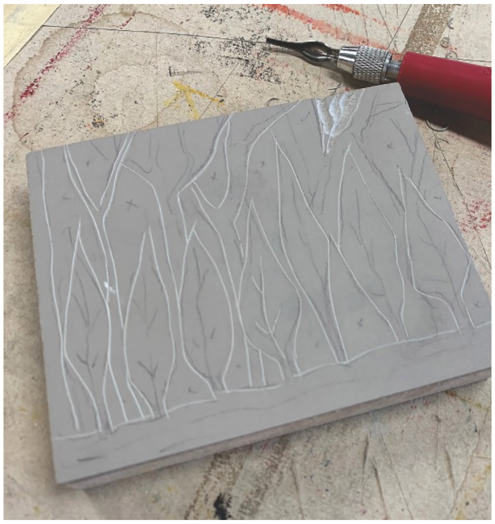


Figure 1.14
The beginning of a linocut with the outlines defined for the image using the smallest V blade

Figure 1.15
The top edge of this paper is deckled, while the side is torn with a ruler.

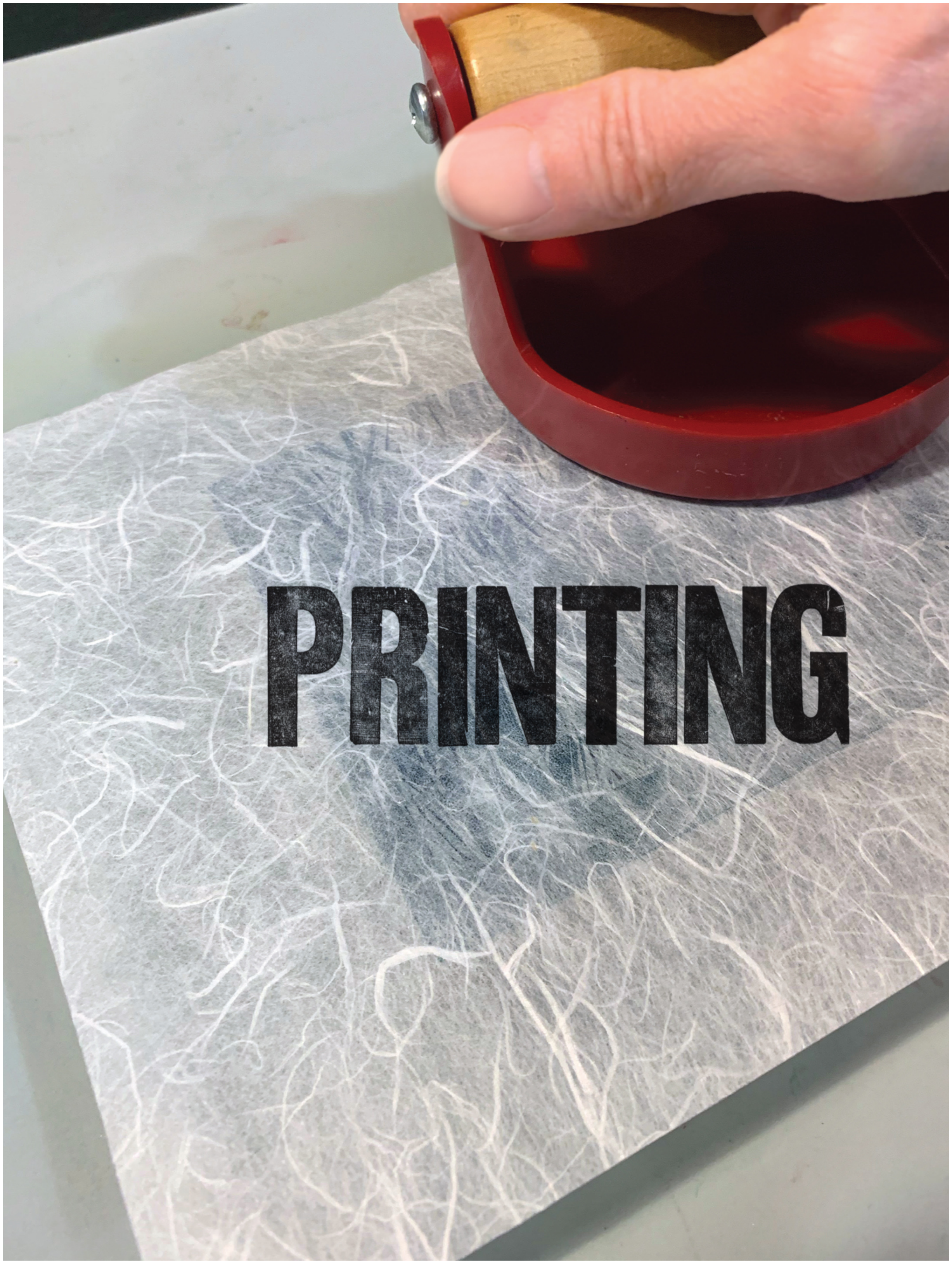


Figure 1.16

A press is not required to print the projects in this book. You can use any of the following to apply pressure to transfer the ink from the printing surface to paper or fabric:

- a baren, which is a flat disc traditionally used for hand-printing blocks (Figure 1.16);
- the back of a metal or wooden spoon useful for smaller prints;
- various sizes of burnishing tools used for smoothing;
- a marble rolling pin or hard brayer for larger prints;
- the palm of your hand;
- a printing rig for stamps (Figure 1.18);
- squeegee, clamps, and a tabletop for screen printing (Figure 1.17).

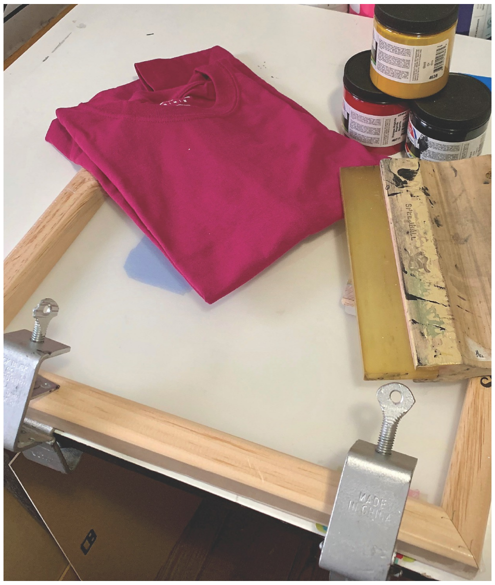


Figure 1.17 *Screen printing requires a squeegee, frame, and clamps to hold the frame in place on a tabletop.*

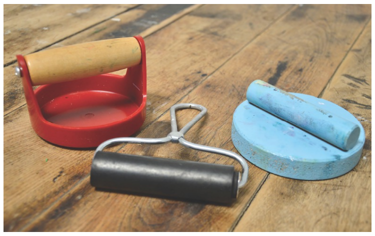


Figure 1.18 *Barens come in different styles. Also shown is a hard brayer for pressure rolling.*

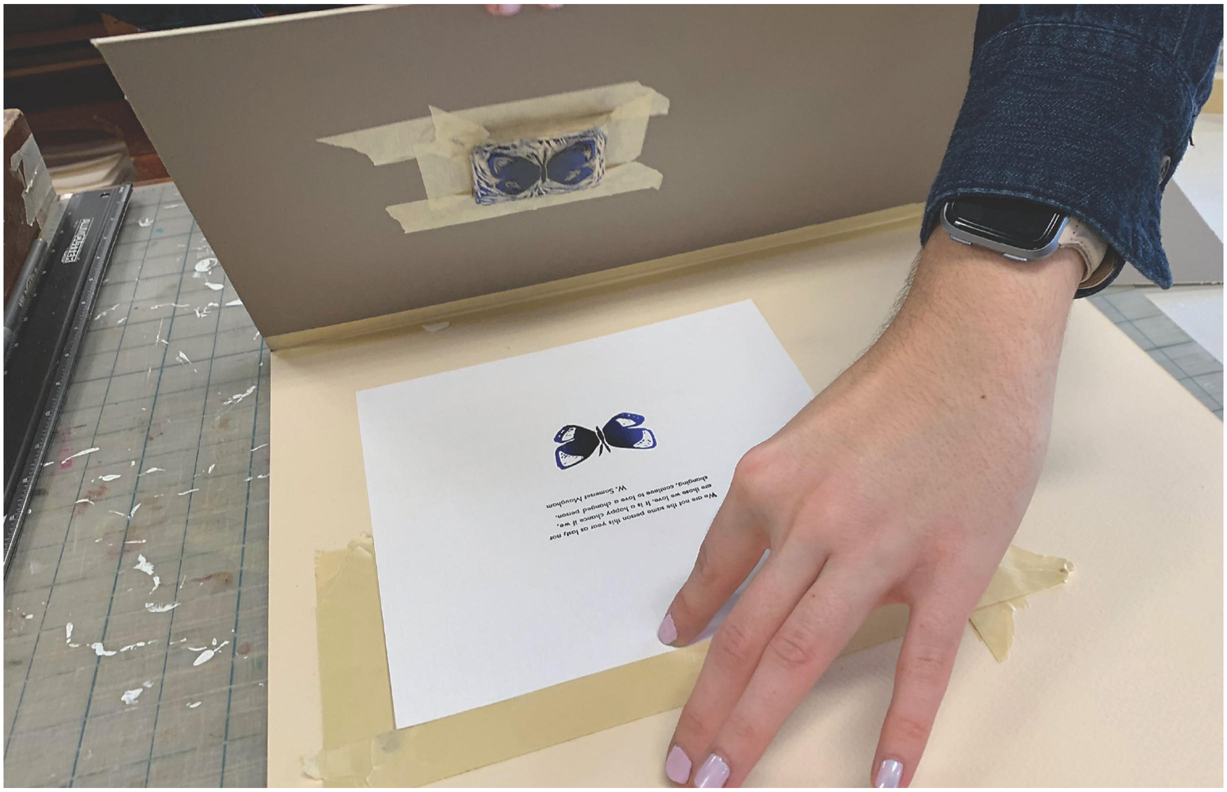
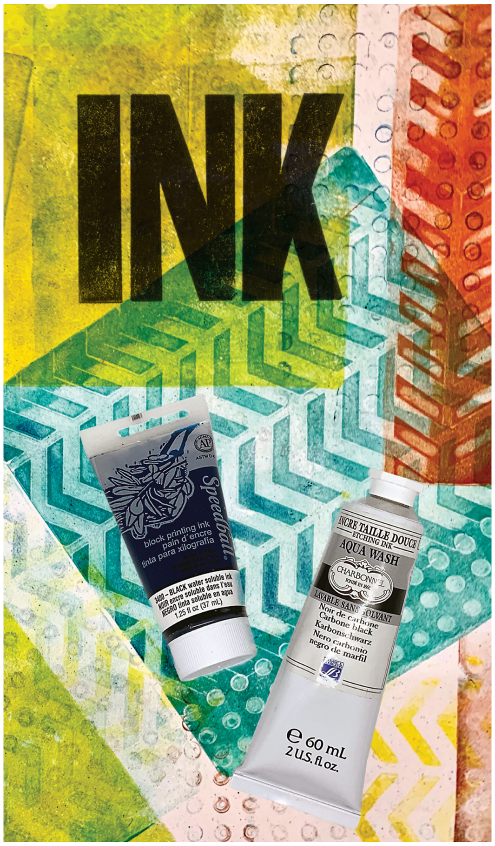


Figure 1.19 *Shown is an example of a simple printing rig for an eraser stamp to print on envelopes. The rig flap is folded over and pressed on to the envelope, resulting in the image being printed in the same area for each copy.*



INK
Speedball
block printing ink
pain d'encre
tinta para xilografía
ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
60 mL
2 U.S. fl.oz.

Figure 1.20
Tubes of Speedball and Charbonnel Aqua Wash inks

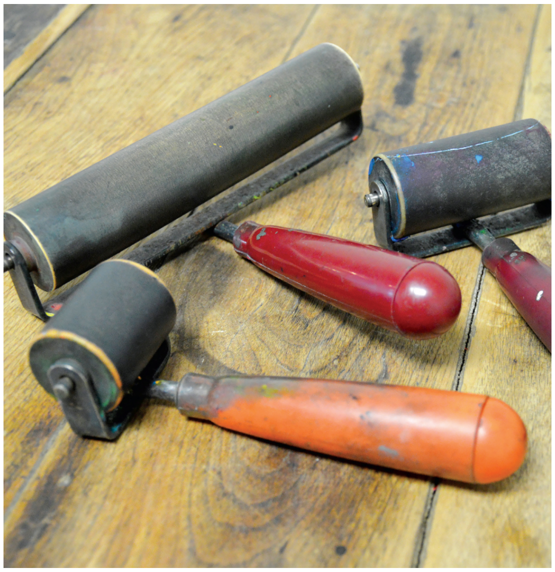


Figure 1.21
Rubber brayers come in different widths, such as two inches, four inches, and six inches. It is a good idea to have at least one small and one large brayer.

For the relief projects in this book, I highly recommend an oil-based ink such as Charbonnel Aqua Wash Etching Ink (Figure 1.20), Caligo Safe Wash Relief Ink, or Akua Ink. These inks easily clean up with water but contain an oil base, so they do not dry out quickly on the inking slab or on the printing plate. Use vegetable oil to rejuvenate the ink if it starts to dry out or get stiff. These inks hold detail better than water-based relief inks. More than likely, you will have to order them online from an art supply store because the crafts stores only carry Speedball relief inks. The project tutorials primarily use Charbonnel Aqua Wash inks, but the other inks will work, some better than others.

Because Speedball water-based inks dry quickly, your working time has to be fast. They are better to use when there is high humidity, such as in the summer. The benefit of these inks is they are cheaper than the oil-based inks, are more readily available, and dry faster. Mixing the ink brands together works in a pinch and will actually keep the Speedball ink active longer.

You will need putty knives to mix inks and a soft rubber brayer or two to roll out ink colors on a smooth surface in preparation of inking the plate. (Figure 1.21) A hard brayer is not recommended for inking, but it is good for applying pressure for printing.

Inking surfaces for mixing and rolling can be any of the following (Figure 1.23):

- acrylic sheets like Plexiglas;
- aluminum foil trays;
- Styrofoam trays;
- acrylic cutting board; or
- any smooth, clean surface, such as an old countertop (even a granite one), which will not stain.

You can buy plastic inking trays, but most likely you will have something around the house that will work.

For screen printing, we will use water-based, acrylic, or fabric inks. All are nontoxic and wash up with water. Water-based and acrylic inks are good for printing on paper or wood. For textiles like T-shirts, totes, and patches, you must use fabric ink, so it will not wash out. For printing on ceramic or glass, we will prepare a special mixture of acrylic glass paint with fabric ink. (Figure 1.22) Speedball and Dick Blick make good nontoxic screen inks, and acrylic glass inks can be purchased at crafts stores.

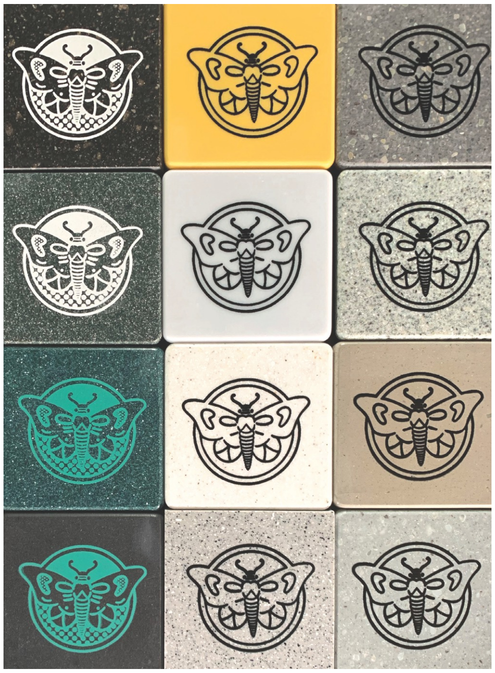


Figure 1.22 *Screen printing on ceramics takes a special blend of fabric ink and acrylic glass/ceramic ink. This mixture makes the ink heat resistant and water resistant, such as on these printed ceramic coaster tiles.*

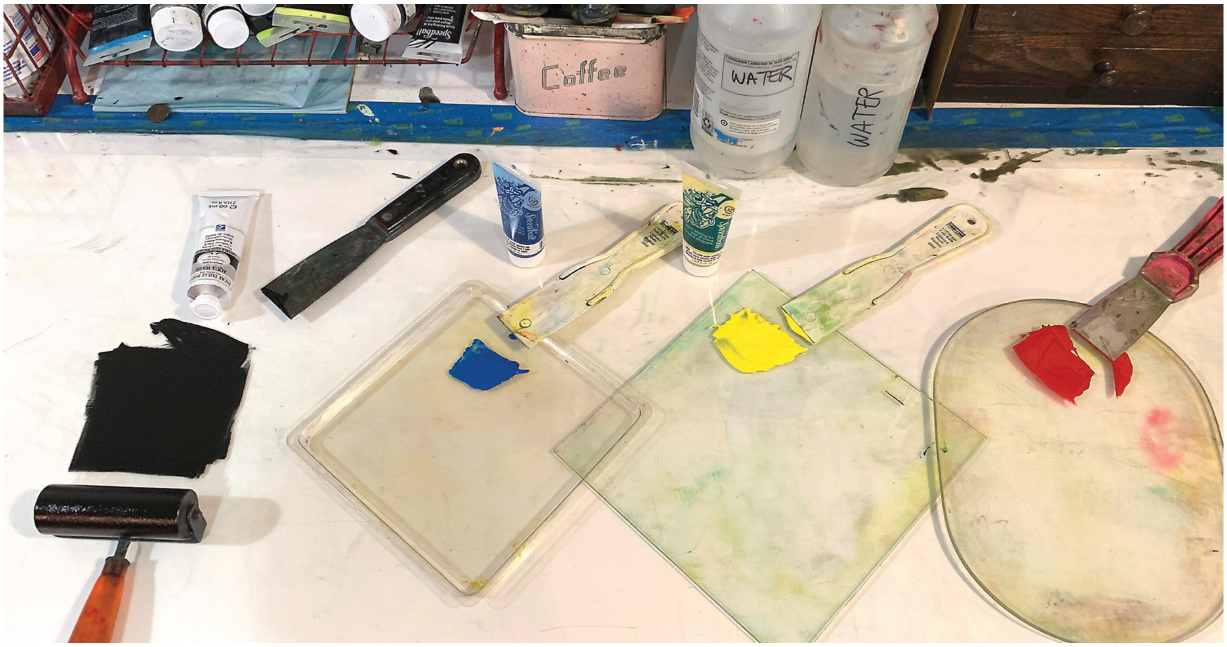


Figure 1.23 *Examples of different types of inking surfaces: Plexiglas, plastic trays, and acrylic are shown.*

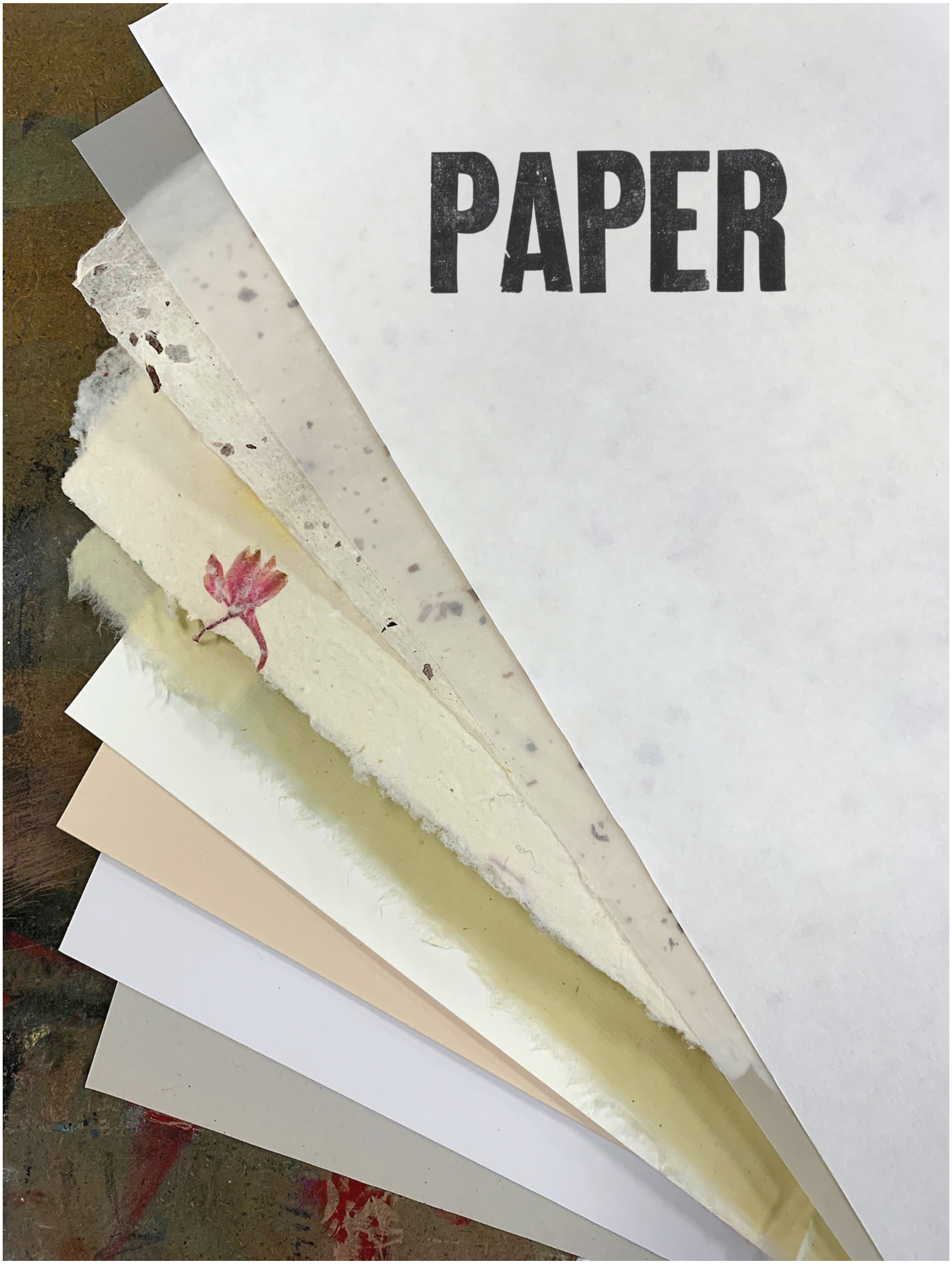


Figure 1.24 *Examples of paper types*

Picking paper for your print project can be exciting and overwhelming because the options are limitless. You can print on anything from copy paper to expensive handmade paper. It is fun to experiment with all types; paper choice can affect the style, feel, and success of a print. I recommend collecting a variety of different colors, weights, and textures. Here are some basics to help you better select and understand paper options.

Two of my favorite online sites to order small quantities of unique papers are cutcardstock.com and legionpaper.com.

- **Archival or acid-free paper** is meant to last and is to be used for fine art printmaking. This type of paper will not fade, turn yellow, or deteriorate if properly stored. Examples are Rives BFK, Arches, Copperplate, and Japanese woodcut papers.
- **Nonarchival paper** is meant for short-lived use such as newsprint, construction paper, poster board, kraft paper, and copy paper. In time it will yellow and become brittle, and colors will fade. This type of paper is good for wrapping paper, cards, sketches, mock-ups, and printing tests.
- **Scrapbook paper** is a fun option because it comes with designs, patterns, textures, and interesting colors.
- **Tissue paper** is great for printing on, collaging, and using as interleaving. Be sure to buy white tissue paper if you intend to interleave prints with it for storage.
- **Japanese papers** are thin and are great for hand-printing.
- Some papers come **deckled**, a soft feathered edge created in the papermaking process.
- **Tracing paper** is semitransparent and used for tracing images and transferring on to a plate. **Carbon paper,** a leftover from the analog days of the typewriter, is great for transferring images too.
- **Acetate, vellum,** or **transparency film** is a clear film that is useful for creating templates, film positives for photo processes, and stencils, and for saving extra ink.

- Clear self-adhesive **shelf-lining paper** is perfect for creating stencils for screen printing.
- **Paper weight** refers to how thick the sheet is. It is defined by pounds according to how many sheets come in a pack, otherwise known as a "ream." Copy paper is typically twenty-eight pounds and card stock will be anywhere from sixty pounds, to eighty pounds, to one hundred pounds and over. You also will see GSM for weight, which stands for grams per square meter. The higher the number, the heavier the paper. (Figure 1.25)

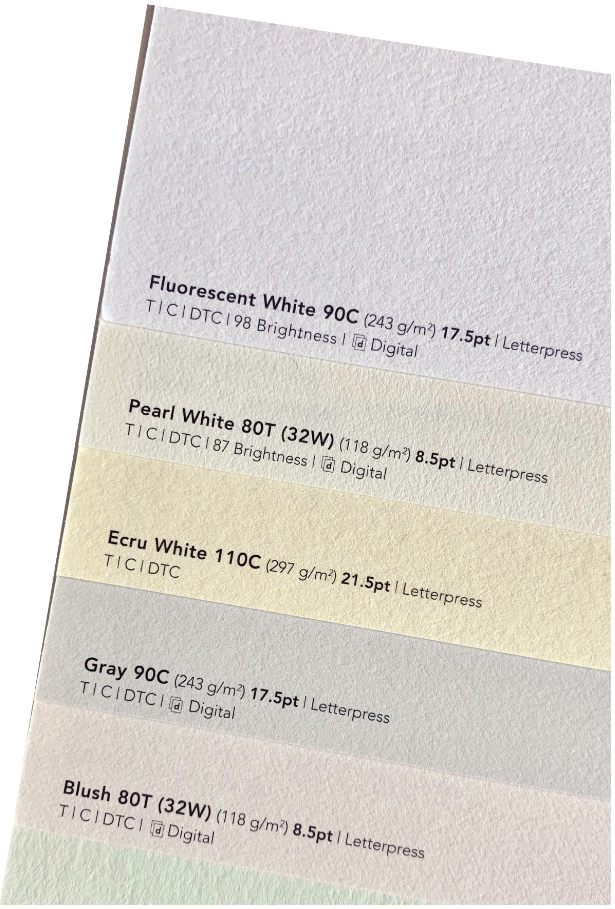

Fluorescent White 90C (243 g/m²) 17.5pt | Letterpress
T | C | DTC | 98 Brightness | Digital
Pearl White 80T (32W) (118 g/m²) 8.5pt | Letterpress
T | C | DTC | 87 Brightness | Digital
Ecru White 110C (297 g/m²) 21.5pt | Letterpress
T | C | DTC
Gray 90C (243 g/m²) 17.5pt | Letterpress
T | C | DTC | Digital
Blush 80T (32W) (118 g/m²) 8.5pt | Letterpress
T | C | DTC | Digital

Figure 1.25 *A paper sample book shows weight, color, and surface texture. This example is from Neenah Paper. Sample books are free from paper manufacturers and include information about the size of papers and formats available, such as envelopes.*

CLEANUP

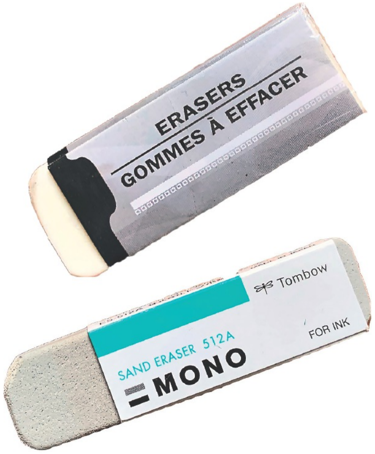


Figure 1.26 *Plastic eraser (top); ink eraser (bottom).*

The great thing about using water washup inks is that cleanup is easy, fast, and safe for the environment. The ink rinses right off with water. When finished printing, simply scrape up any excess ink and discard. Old telephone books or newspapers are useful for ink cleanup. If you have a lot of ink left over, store it between two sheets of transparency film or in wax paper, plastic wrap, or a plastic lidded container. It should keep from a few days to a couple of weeks.

- For surface and roller cleanup, use paper towels or rags and a spray bottle filled with water. Baby wipes also work great for cleaning small amounts of ink off the tools and your hands.
- If you have stubborn stains on your hands, try baby oil or vegetable oil. For stubborn ink on surfaces, try a general household spray cleaner. Rubbing alcohol removes any oily residue on surfaces.
- If you forget to wash off your rollers or plate, mineral spirits will clean off the ink.
- If you accidentally get ink fingerprints or smudges on the nonprinted areas of your project, you can erase them after the ink is completely dry. An ink eraser has grit in it like sandpaper and works well on paper and

textiles. (Figure 1.26) Just be careful not to rub too hard, lest you damage your paper.

- Big, dark inky smudges most likely will not erase. Plastic white erasers work well for pencil lines or dirt and will not damage paper surfaces. (Figure 1.26)

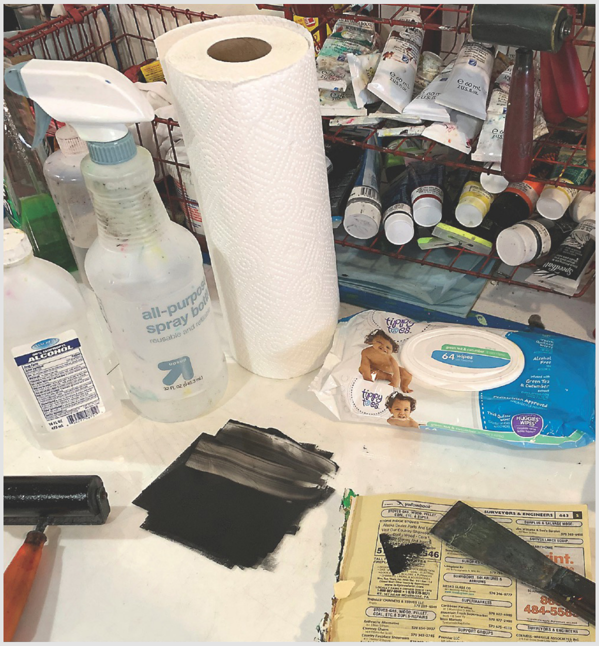


Figure 1.27

Suggested Cleaning Supplies

☐ Bounty or good-quality paper towels
☐ Rags
☐ Baby wipes
☐ Spray bottle
☐ Old phone book or newspaper
☐ Simple Green or other spray cleaner
☐ Mineral spirits for dried ink
☐ Rubbing alcohol
☐ White plastic eraser

☐ Ink eraser

EDITIONS

Fine art prints are traditionally reproduced in “editions,” which means multiple prints that look exactly alike. Same color, same paper, same size, and consistent inking make for a good edition. Editions can be as small as five prints. They are signed and numbered by the artist. Typically, the title of the print goes at the bottom on the left-hand side, the number of the print over the total number in the bottom center, and the artist’s signature on the bottom right. (Figure 1.28)

Each test print made is referred to as a “state.” If there are test prints that you want to keep, the earliest state is labeled as a “trial proof ” (TP) and the last one made before the edition is called an “artist proof ” (AP). There might be multiple artist proofs if you have variations in ink color or paper. (Figure 1.29)

Monoprints, which are single unique prints from the same plate, are signed and can either be called an AP or labeled 1/1.

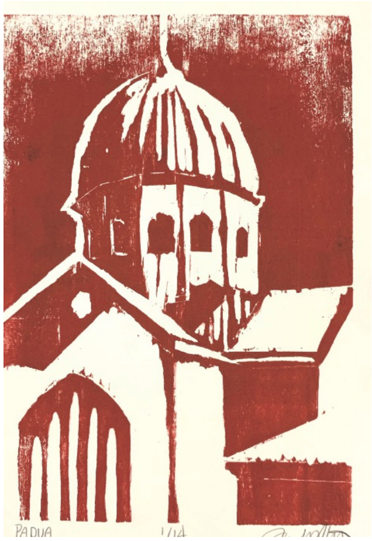


Figure 1.28 *Note how the title, edition number, and signature are placed.*

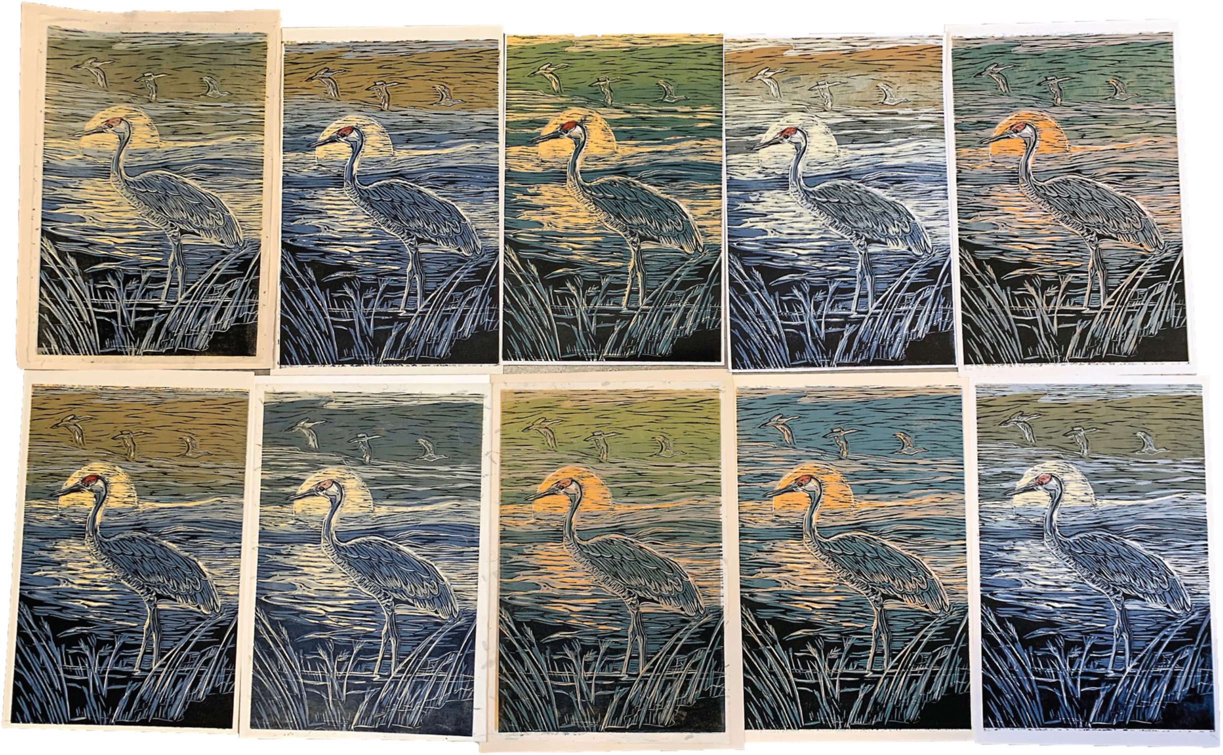
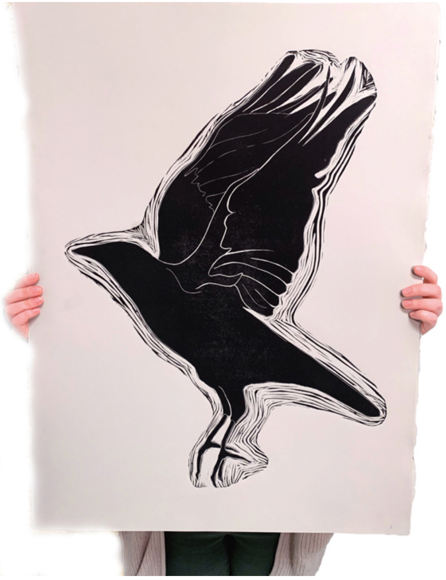


Figure 1.29 *Even though these relief prints look similar and were printed from the same plate, they are not a true edition because they all have slightly different colors and are on different papers. These prints are considered artist proofs.*

RESOURCES

Printmaking Supplies

Dickblick.com
GraphicChemical.com
Jerrysartarama.com
renaissancegraphics.com
michaels.com
hobbylobby.com
ezscreenprint.com
cutcardstock.com
legionpaper.com



Figures 1.30 & 1.31 *Unmounted battleship gray linoleum plate and print on Rives BFK paper*

CHAPTER 2

Your Creative Toolbox

CLIMATE CHANGE
12
YEARS to STOP
LETTERPRESS
PRINTMAKING
RESOURCES

Figure 2.1
Use twine, tacks, and binder clips to hang your work to dry and display.

YOUR WORK SPACE

Spending a little time setting up your work space will get you organized with easy access to all your tools, an inking and printing worktable, and a clean area to leave your prints to dry. You can easily take over a room if you are planning a big project or make a more portable, easy-to-store set-up for smaller projects. Ask yourself the following:

- Do you have a space that can get dirty, or do you need to protect surfaces like carpeting and walls?
- Do you have a place with enough room to set out your tools and supplies?
- What are you printing, how big is it, and how much table space will it require?
- Do you have a clean place to stack your blank paper/textiles before printing and for your printed items to dry?

The following are tips and suggestions on how to convert a space into a temporary printing area.

- The kitchen is an ideal place to work because you have easy access to a sink for cleanup, counter space to work, and a table for spreading out prints to dry. Unlike standing at a table, counters offer a better height to work at with less likelihood to wear on your lower back from bending over too long. Place an acrylic sheet like Plexiglas on your work surface to protect it. It also works great for mixing inks. The acrylic sheet cleans right up with water or a mild spray cleaner, plus it is portable and easy to store. Another benefit is, if you put a white sheet of paper underneath it, you can see your ink colors accurately, which is helpful when mixing color. (Figure 2.2)

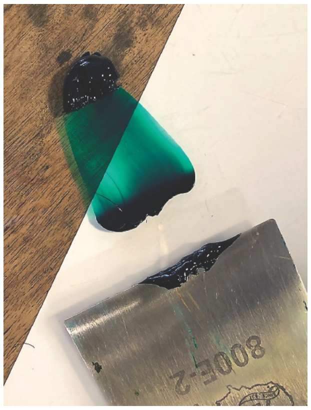


Figure 2.2 *By putting white paper under an acrylic sheet, you can see the ink color more accurately.*

- Any room or space to place a large table is appropriate. First, protect the table with a white plastic tablecloth, newspaper, or white paper. Then place an acrylic sheet over it for the inking and printing. (Figure 2.3) If you do not have a large sheet of acrylic, use small scrap pieces or any smooth surface like acrylic cutting boards, transparency film, aluminum trays, or Styrofoam plates that will serve as your inking surface. You can use masking tape or painter’s tape to secure flat inking surfaces, so they do not shift when working. For ink cleanup, use a spray bottle filled with water. Baby wipes also work well for cleaning small amounts of ink off the tools and your hands. Rubbing alcohol will degrease any oily surface.
- To air dry your prints, you can string some twine and use small binder clips to hang them. (Figure 2.1) A clothesline or a wooden clothes

drying rack also is an option. Any shelving or flat surface where you can lay out your prints to dry overnight will work too. Prints can be stacked with protective sheets of scrap paper in between, so the ink does not transfer to the back of the print on top.

- If you want to set up a screen printing area, you will need to buy butterfly hinge clamps that hold the screen frame in place. Some clamp styles attach to a worktable, or you can screw clamps to a board for easy portability and storage. (Figure 2.4)

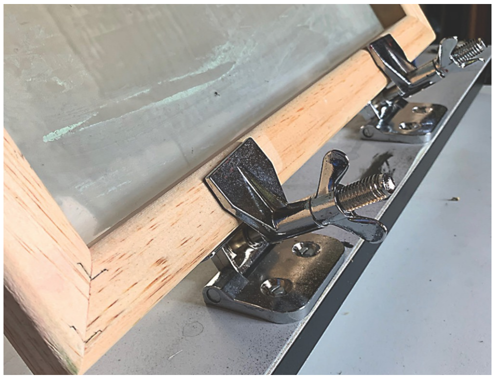


Figure 2.4 *Butterfly hinge clamps screwed to a board are needed to hold the screen in place while printing.*

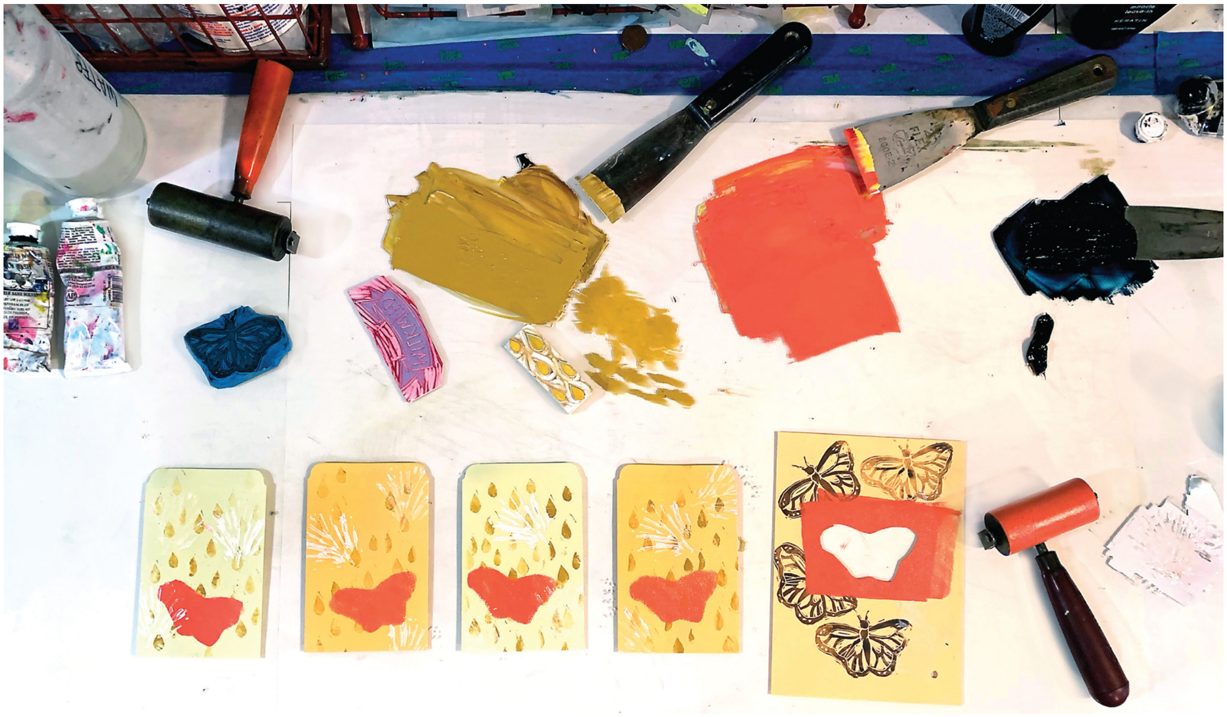


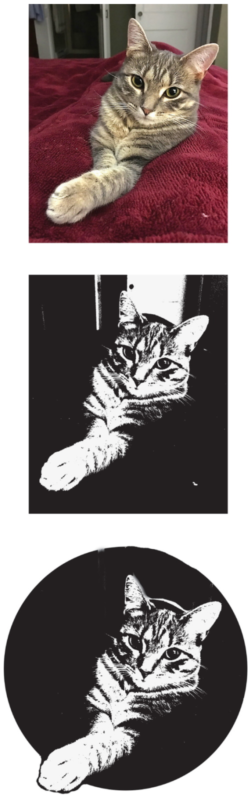
Figure 2.3 *You will need a big work surface if you are using multiple colors at a time. This work surface is a six-foot folding table, lined with white poster board and a large acrylic sheet placed on top and taped down.*

INSPIRATION

Coming up with an idea for an image or design can be one of the biggest hurdles in the whole process. Here are some of my favorite ways to get inspired:

- **Nature.** There is so much to use right in your backyard that you can trace, photograph, or scan for reference. You can ink and print from most natural objects: leaves, flowers, twigs, pine cones, ferns, acorns, seeds. The options are endless!
- **Animals.** How about your pet or a favorite animal? Pick ones that have unique markings or strong visual contrast, like a penguin or a giraffe.
- **Food.** Sprinkle doughnuts or pepperoni pizza? Pick items with unique shapes, patterns, and color.

- **Everyday objects.** How about kitchen utensils or a favorite chair? Maybe you can even ink up the bottom of your shoes and print them.
- **Childhood.** Did you have a favorite toy? Bicycle, swing set, or some Army figurines?
- **Travel.** Beach ball, palm tree, or a cool shell from your summer vacation? How about something iconic like a gondola in Venice or London’s Big Ben?
- **Landscape or cityscape.** Your neighborhood or town might have interesting architecture or a unique skyline. Maybe a dramatic sunset over the mountains or a thunderstorm over the prairie.
- **Type.** Have a favorite quote? Make a gift with a name on it, a sign, or a phrase on a greeting card. If you use type, make sure it is backward on the plate!
- **Museum.** There are endless possibilities looking at art for style, color palettes, movements, and storytelling. Native American art and textiles have beautiful pattern work. Natural history museums are full of inspiration—dinosaurs, for one!
- **Library.** Literature, poems, and history offer infinite inspiration. In addition to books, libraries have art and other special collections that have royalty-free images for download.
- **Holidays and events.** You always can make cards, wrapping paper, and decorations and pull from a wealth of existing symbols and phrases. Go to a card or party store for ideas.



Figures 2.5, 2.6, & 2.7 *Using a photograph as a starting point works as long as you do not expect an exact reproduction. Any kind of digital editing software or copier will turn it into black and white, so it is more graphic. As you refine your idea, the final print will become even more simplified and stylized when you transfer it to the block for cutting or to the stencil for screen printing.*

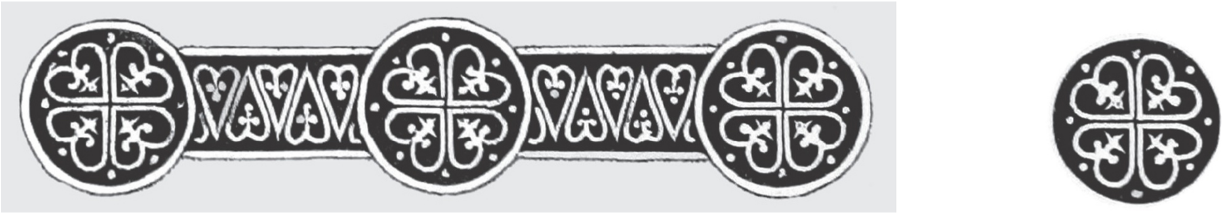


Figure 2.8
Image from the British Library taken from a poem. An idea would be to use the circle design only and cut into a stamp.

Image Resources

There are online references where you can get ideas, use pictures, or remix illustrations for your projects. Whether you are an artist, hobbyist, or nonartist, there are many ways to get images that are okay to use without copyright infringement. Here are a few public libraries and museums that offer free unrestricted use:

- **The New York Public Library** https://digitalcollections.nypl.org/
- **Library of Congress** https://www.loc.gov/collections
- **The Met** https://www.metmuseum.org/about-the-met/policies-and-documents/open-access

Other fun sources to find vintage images include:

- https://www.oldbookillustrations.com/
- **Vintage Sewing Patterns** https://vintagepatterns.fandom.com/
- **The British Library** https://www.flickr.com/photos/britishlibrary

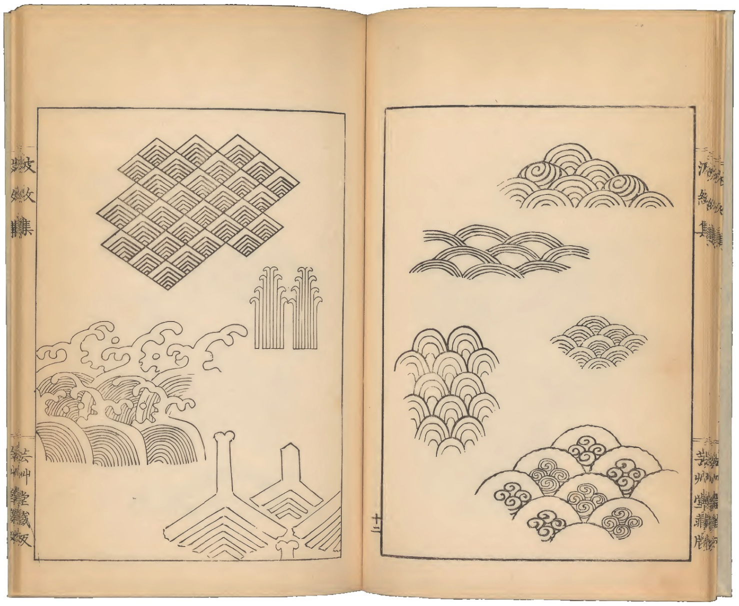


Figure 2.9 *These sketches, from 1903, are from the Met's online collection featuring ancient wave and ripple designs by the Japanese artist Mori Yuzan. Using one or combining a few of them would be allowed because they are in the public domain.*

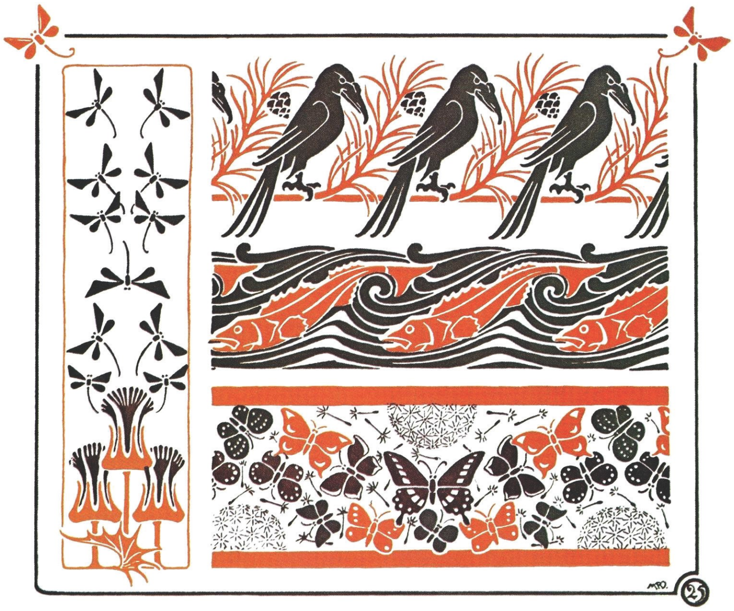


Figure 2.10
This ornamental plate, from a book published in France in the late 1800s, contains art nouveau designs and was downloaded from the Old Book Illustrations website. Because the illustration is in the public domain, you are allowed to use all or part of it. It works especially well for block printing because of the graphic nature. You could change the art as needed for your project.

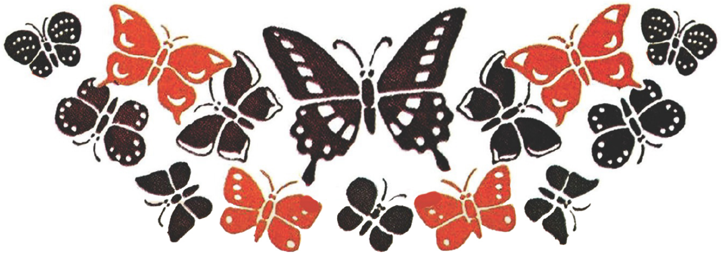


Figure 2.11
As an example, extract the butterflies from the design as inspiration for three or four rubber stamps. Print your own butterfly pattern with a new color scheme.

A Brief Word about Copyright

If you are using an image other than your own, with no plans to sell it for profit (like a single greeting card to your mom or a print to hang in your bedroom), you can use imagery of your choice under the fair use section of the Copyright Act. It is always best to ask permission, though, if you plan to use someone else’s photograph, illustration, or other artwork.

If you are a crafter or artist who plans to exhibit and sell your creations, you can use works that are in the public domain without restriction or penalty. Art, literature, movies, and other works released ninety-six years ago or earlier are in the public domain. This will be the case every January 1 until 2073.

Another source of license-free work is through Creative Commons. It offers a body of work for sharing, repurposing, and remixing. Through the use of CC licenses, millions of people around the world have made their photographs, videos, writing, music, and other creative content available for the public to use.

For more information about copyright and fair use, visit copyright.gov.

For more information about Creative Commons, visit https://creativecommons.org.

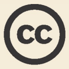


Figure 2.12 *Look for the Creative Commons symbol for license-free sharing.*

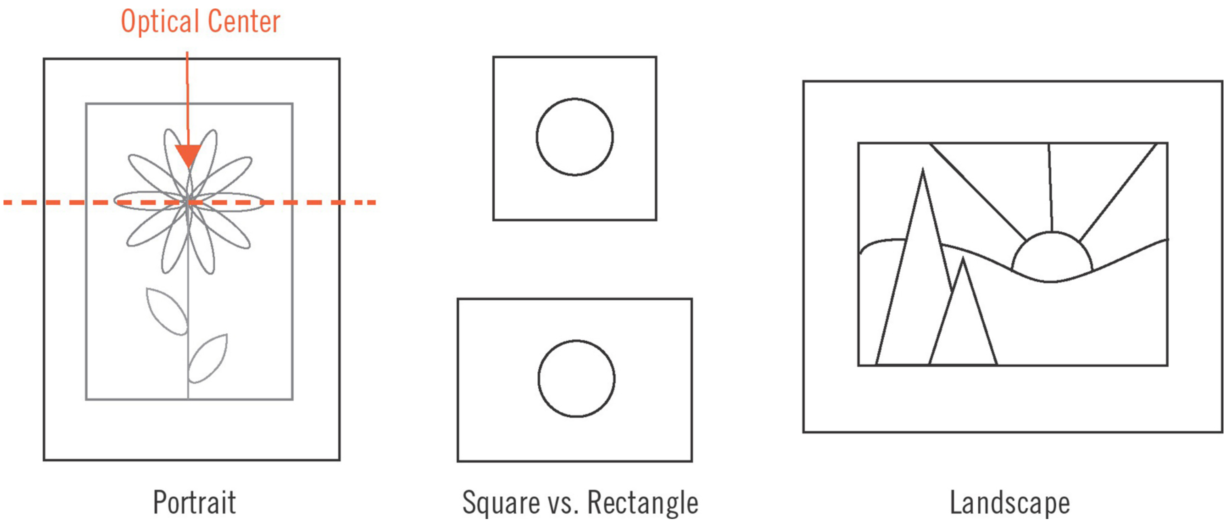


Figure 2.13 *Layout styles*

DESIGN & PRODUCTION

Before starting your project, you will need to make decisions on size, page layout, and color, along with understanding basic art terms. Covering the foundations of art and design is a book in itself, but focusing on a few important areas will help you be more successful and make for a fun experience. Consider the following when planning your ventures.

Size

How large you make your print determines how detailed or simple your design will be. If it is small, the design should be more simple, with less detail and well defined lines so it is easy to see. It is difficult to cut fine features into a tiny block with the linocut tools.

A big image allows for more detail and variety of line work and is easier to cut. Keep in mind that large prints take more time to cut and need sizable paper, additional ink, and more physical effort. A good rule of thumb is when you are first learning, start small.

Page Layout

Presentation is everything. If you have a beautiful design but it is printed crooked and not placed properly on the right size paper, it can ruin the appearance of the print. Try to leave an inch or two of blank margins. This will create a clean matted look and allow you to pick up the paper without smudging the ink during the printing process. It also leaves a place to sign and number your print.

Consider the following when determining where to place your image on the page (Figure 2.13):

- The optical center is not the center of the page. It is actually one-third down from the top.
- Portraits appear better in a vertical format.
- Most circular designs look ideal in a square format.
- Landscapes present best in a horizontal format.

If you are not sure what seems presentable for your design, experiment with different paper sizes and orientations.

One Color, Multiple Color, and Blended Color

In printmaking, a single block is printed in a single color, which is called a one-color or monochromatic print. To add color to a print design, each color in the print requires its own separate block and can be very challenging to align. This requires careful planning and separation of the colors, which will be lined up or registered on the print. For instance, a print with four colors will need four blocks and will be printed four times on the same piece of paper. (Figures 2.16–2.20) In this example, the illustration was designed to have loose registration, allowing for slight misalignment. Notice how the black outline is not perfectly aligned to the color shapes and the white of the paper may or may not show through. Building in ample margins and overlaps in multiple-color printing makes the whole process much easier.

An easy way to get multiple colors on a single plate is doing what is called a “blended gradient” or a “rainbow roll.” This involves putting multiple colors on a single roller, rolling the blended colors on the plate, and then printing. (Figure 1.2 in chapter 1)

Drawing with Line

Line is the primary way to define images for block printing. Lines have width, direction, and length. They can create texture, space, and movement, whether they are straight or curvy. They can produce tonal areas by using techniques like stippling, crosshatching, and spacing between parallel lines. Lines form and suggest shapes. Using the linocut handle and the different blades, will allow you to create any style of line drawing. (Figures 2.14 & 2.15)

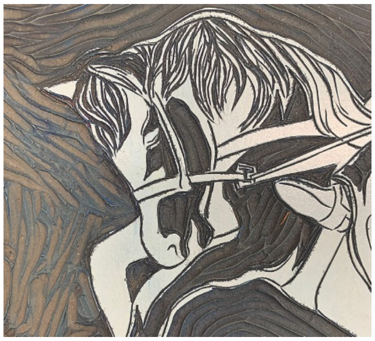


Figure 2.14
In this linoleum block, the curved, closely drawn lines in the horse's mane create texture and direction while suggesting the shape of the head.

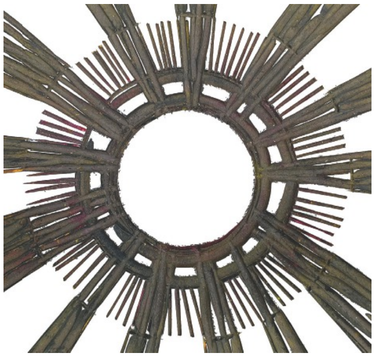
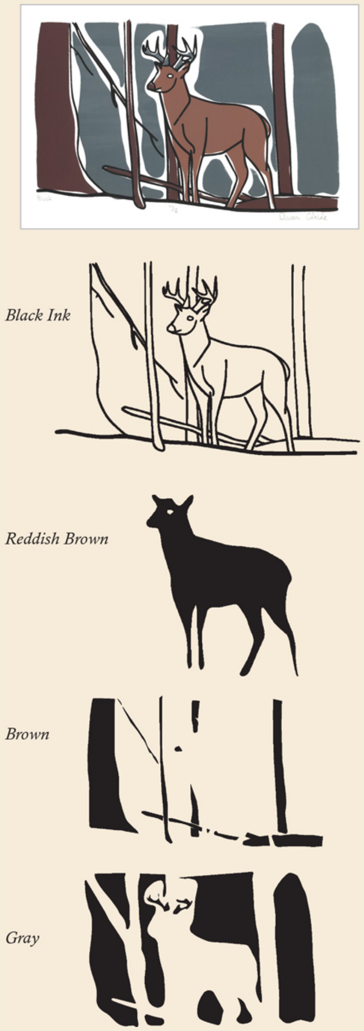


Figure 2.15
Lines create texture, direction, and rhythm while forming a circular shape, even though only straight cut lines are used.



Figures 2.16–2.20
This print is four colors. Each color is separated out, requiring its own plate. Then one color is printed at a time, each carefully lined up to the previous color. (Art by Devon Clarke)

Getting Started

When looking for imagery and ideas, pick designs that work well with relief printing. Graphic, bold, linear prints work best, whereas photographic images do not. Photographs can be used as references to create simplified, flat color images. Some of our projects will use blended colors and more painterly approaches. Screen printing and solar plates can use a photographic process but not in the traditional way of reproducing a high-quality photo.

Keep in mind the general process from idea to plate to print because this will determine how you approach making your image and generating a successful print.

Sketch to Relief Block

Your sketch or design needs to be the actual size of the block. (Figure 2.21) The most direct way to make sure this happens is to draw right on the block, though that may not be ideal because the image will print backward. In order for it to print in the correct orientation, it needs to be drawn flipped (mirror image) on the block. This is especially critical for type! To make this happen, first put your design on paper. This image can be hand-drawn, hand-traced from a photo, or digitally printed. Flip the image and then transfer it to the block.

There are two easy ways to transfer the image to your plate: carbon paper or soft pencil.

- The computer is a great way to flip your image. Reverse it in any photo editing software and print out. Then place carbon paper between the printed image and the block and tape it down so the paper does not shift. (Figure 2.22) Using a ballpoint pen, trace over the image. The pressure will transfer it to the plate. (Figure 2.23)
- If you do not have carbon paper, use a soft lead pencil, like a 6B, or a graphite pencil to make your own transfer paper. Using the side of the pencil tip, evenly cover the back of the paper behind the image with solid lead. (Figure 2.24) Then tape the paper to the plate, draw over the printout with a ballpoint pen, and the pencil lead will transfer the image to the plate.
- If you do not have a computer to flip your image, use a soft dark pencil to put the drawing on tracing paper.

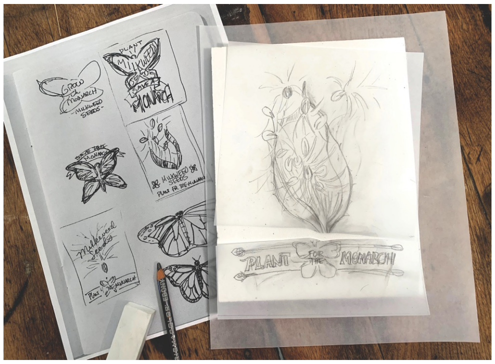


Figure 2.21 *The design process shows ideas in a sketchbook and then the final drawing on tracing paper.*

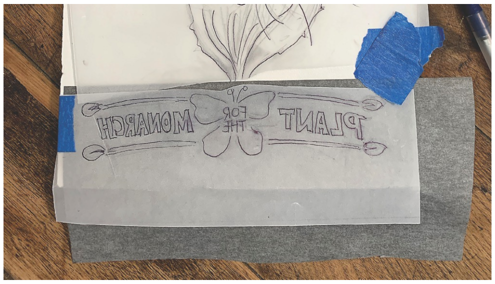


Figure 2.22 *The tracing paper is flipped over. Then carbon paper is placed beneath the drawing, and the drawing is taped to the block and retraced with a ballpoint pen.*

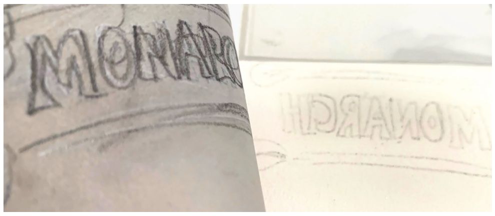


Figure 2.23 *The result is a reversed drawing on the plate, ready to be cut out. The image will print so the type reads correctly.*

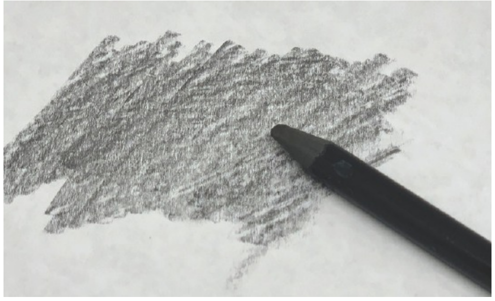


Figure 2.24 *To make your own transfer paper, use a soft lead pencil to cover the back of your drawing.*

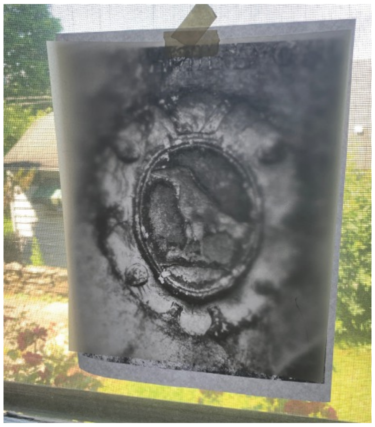
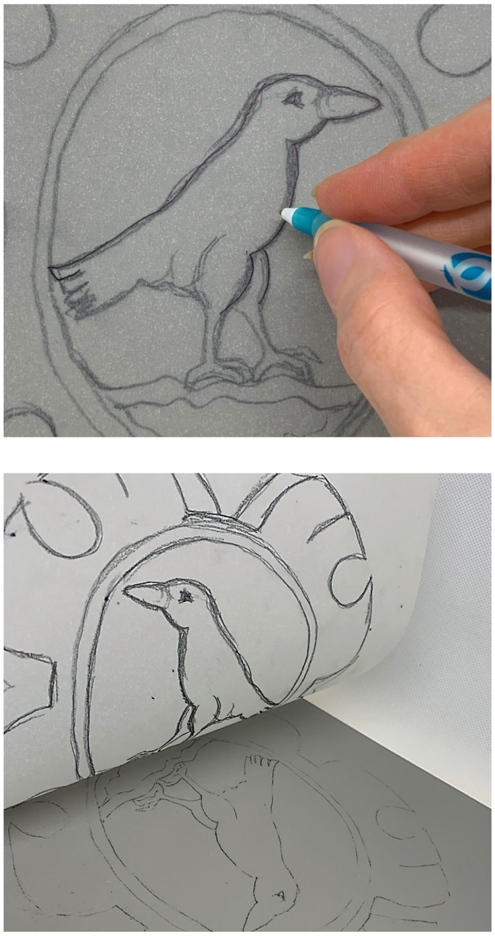


Figure 2.25 *When transferring a drawing to tracing paper, tape the papers to a window and use the daylight to help you see the image, so you can accurately trace the design.*



Figures 2.26 & 2.27 *This technique simply transfers the soft dark lead of a pencil drawing on to the plate by retracing the lines on the back of the tracing paper with a ballpoint pen.*

If you are having trouble seeing the image through the tracing paper, tape the papers to a window on a bright day and you will be able to see it clearly. (Figure 2.25)

- Once the drawing is on the tracing paper, flip the sheet over to transfer it to the plate. Firmly go over the drawing with a ballpoint pen, pressing firmly but not too hard so as not to press into the plate or tear the paper. The pressure will transfer the pencil lead to the plate. (Figures 2.26 & 2.27) Make sure your pencil lines on the original drawing are solid and heavy, so you can easily see the transferred lines on the plate.
- If the drawing or photo is on regular paper and you do not need to flip it, then use carbon paper or the pencil lead technique to transfer the

image to the plate. Now it is time to cut the design from the block.

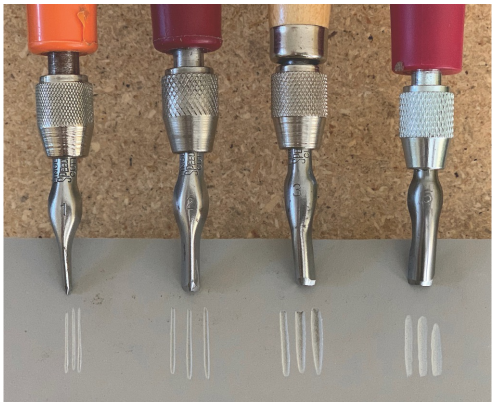


Figure 2.28 *These are the four blades you will use the most: 1, 2, 3, and 5,which come in Speedball Lino Set No. 1. Working small to large, there are two V shapes and two U shapes.*

Cutting the Block

Once your image is on the block, carefully make notations on it of what to cut away and what to leave. What you leave is what prints; what you cut away does not. It can get confusing keeping it straight in your head. I recommend putting a small *x* on the areas you want to cut away. It is easy to get caught up and accidentally cut away a part you did not mean to—and there is no putting it back!

Follow this process when cutting your block:

1. Mark areas to cut away with an *X*.
2. Take the smallest V shape blade (number 1) and outline your drawing. Remember, what you are cutting away will not print. So you may want to cut to the inside or the outside of your line—or both sides of it if you want that line to print.

   By cutting an initial outline, you also are creating a physical “stop.” This cut line will help stop your blade as you are cutting from another direction. It is very easy to slip and cut beyond your drawn line.
3. Take the next size up V shape blade (number 2) and cut your thicker lines. The V blades are mainly what you will use for cutting most of the

drawing.

4. Next take one of the U blades (numbers 3 or 5) to clear out the background. Follow the contours of your image and cut away from the lines of the drawing. There is always the chance you will slip and cut into the design. That usually happens when pressing too hard, and there is no need to go that deep.
5. The next step is to take a proof print on scrap paper. This allows you to check your work and go back and make revisions until you are ready to print. We will cover how to print later in each project.

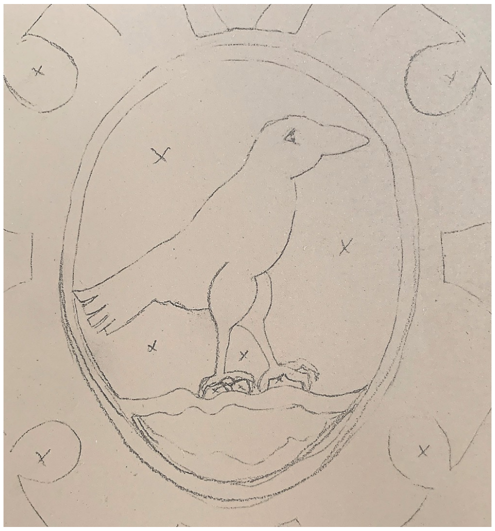


Figure 2.29 *X marks the spot to be cut away. Anything left on the plate will print.*

Safety First!

When cutting linoleum blocks, always, always, always cut away from your body and keep your hands behind the block. NEVER cut toward your hand, or you will end up with a V-shaped bleeding cut in your finger. It happens to everyone. Keep checking your positioning. A bench hook (Figure 2.30) will keep your block in place, so you will not be tempted to put your hand at the top. For easier cutting:

- Heat up linoleum. Put it in the microwave for thirty seconds or in the oven at 250 degrees for five minutes.
- To avoid slipping, try not to cut deep or press too hard.
- Use any of the easy-cut alternative relief plates.

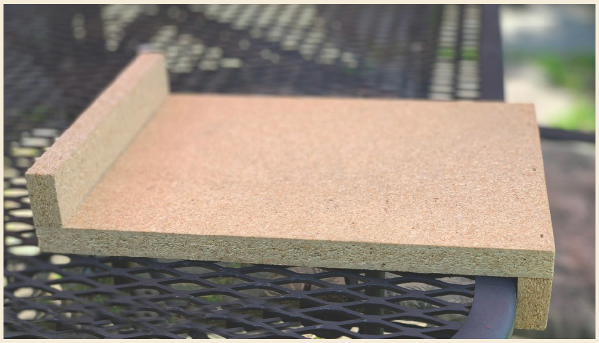


Figure 2.30 *Bench hook*

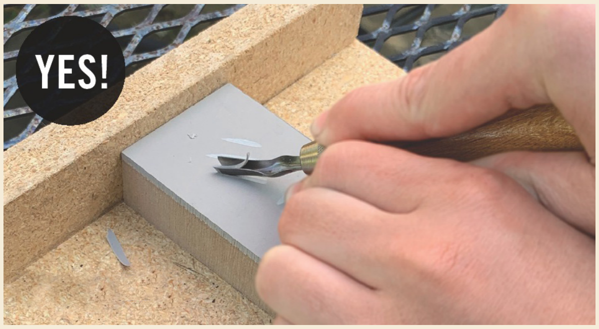


Figure 2.31

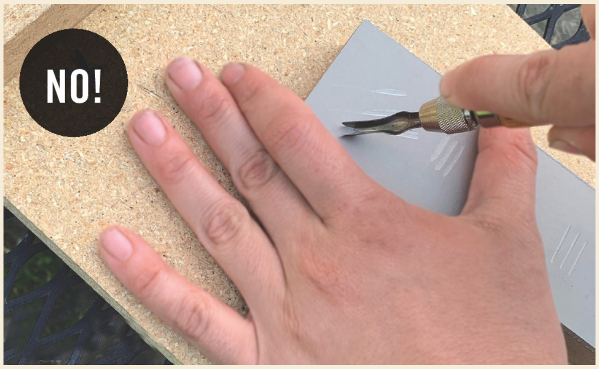


Figure 2.32

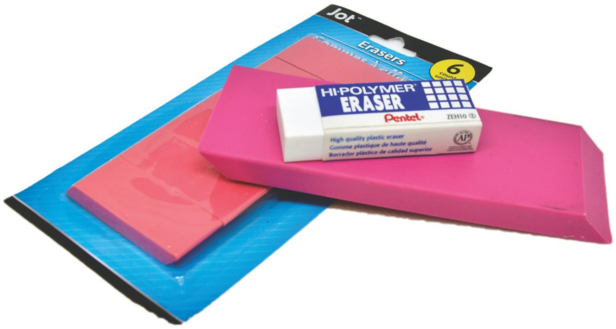


Figure 2.33

Making Stamps

Custom rubber stamps are easy and fun to make! They can be hand-cut from soft plastic erasers found at the dollar store or office supply store. The plastic erasers are perfect for small shapes to make overall larger patterns referred to as “surface design.” You can use both sides of the eraser for different designs.

It is as simple as drawing your design on the eraser and cutting away what you do not want to print. The linocut handle and blades will give you the most control, but you also can use a utility or X-Acto knife to aid in cutting.

For larger and more detailed designs, use the easy-cut rubber blocks available for purchase at arts and crafts stores.

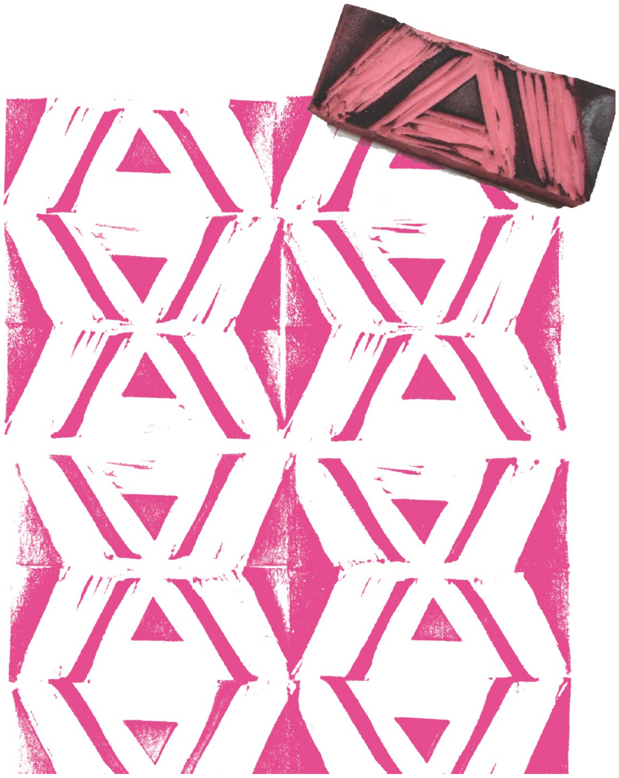
Steps for Making a Plastic Eraser Stamp

1. Draw your design on the eraser. Draw an *X* on the areas to cut away, to avoid mistakes.
2. Using a linoleum cutter, remove the areas that you do not want to print. Erasers are very easy to cut, unlike linoleum.
3. As you work, test your stamp by taking test prints. They will show you areas that need revisions, such as if your lines are too thin or an object needs more work. A simple stamp pad is useful for testing stamps.

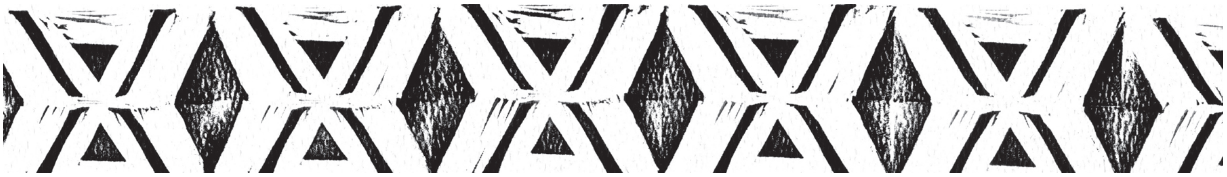
Stamped Patterns

Patterns are fun visuals that create rhythm and direction. They are easy to make with rubber stamps, which can be printed to cover a large area like a tablecloth or a small area such as a greeting card. Repeating elements creates movement, harmony, and unity. Rhythms can be random, regular, alternating, flowing, spiraling, meandering, wavy, or symmetrical.

Continuous patterns create the need for planning how each edge connects to the other (Figures 2.34–2.36). A design that has space around it and does not touch the next impression is the easiest pattern to make. (Figure 2.38)



Figures 2.34, 2.35, 2.36 *The pink triangle stamp (above right, inset) was designed so the triangles on the sides will line up to make larger triangles and diamond shapes (above right). Depending on the number of rows or columns, new shapes, directions, and rhythms emerge.*



Note in the black print (below), where two rows of the stamp connect, how different the pattern looks in comparison to the pink version. The stamp pattern in the pink print was repeated in six rows and two columns.

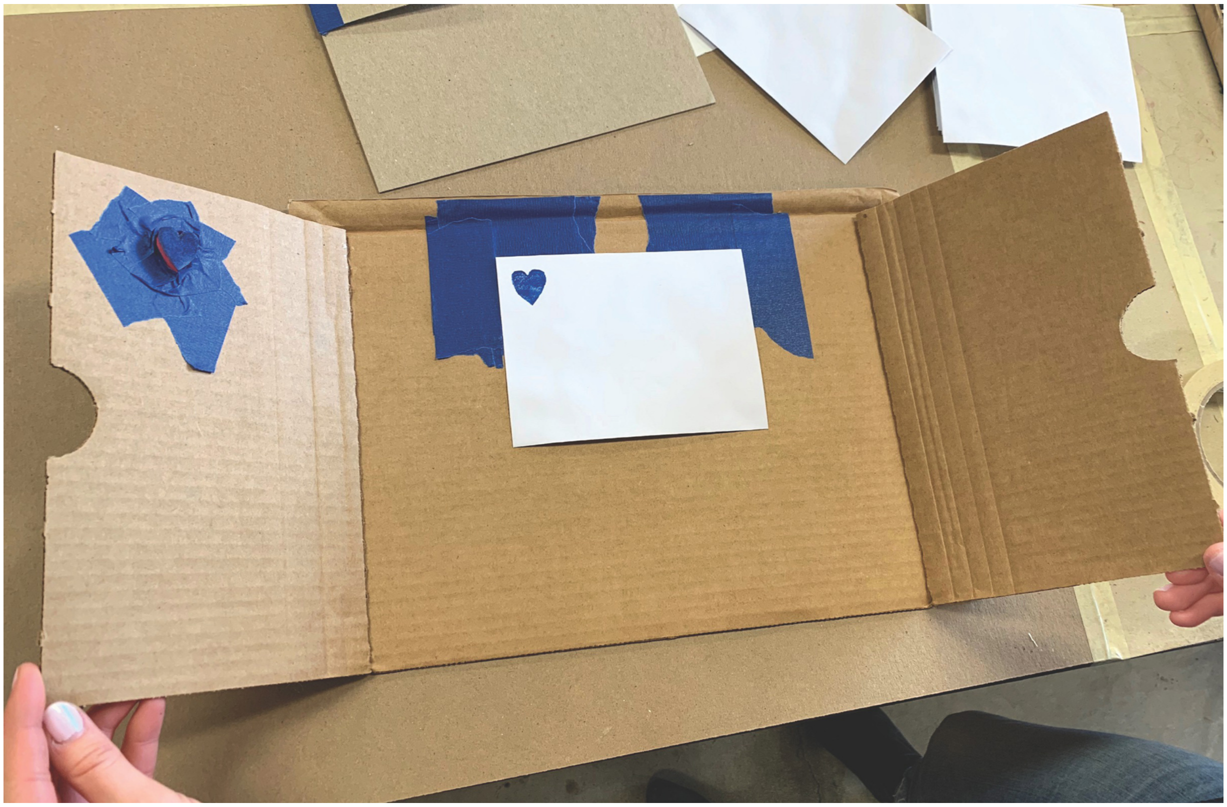


Figure 2.37 *Printing rig for stamping an envelope*

Making and Using a Printing Rig

When printing with a rubber stamp, you are most likely just eyeballing where it goes and most of the time that works fine. But if you have a design where the stamp needs to be placed precisely each time you print, then you should set up a printing rig. An example would be if you are placing a design in the corner of an envelope and you want to print twenty of them, like the heart envelope above. (Figure 2.37) The rig requires only hinged cardboard and tape to hold the stamp in place and to define where the paper is placed each time for printing.

We will create and use custom stamps to make gift wrap and a matching note card in chapter 4.

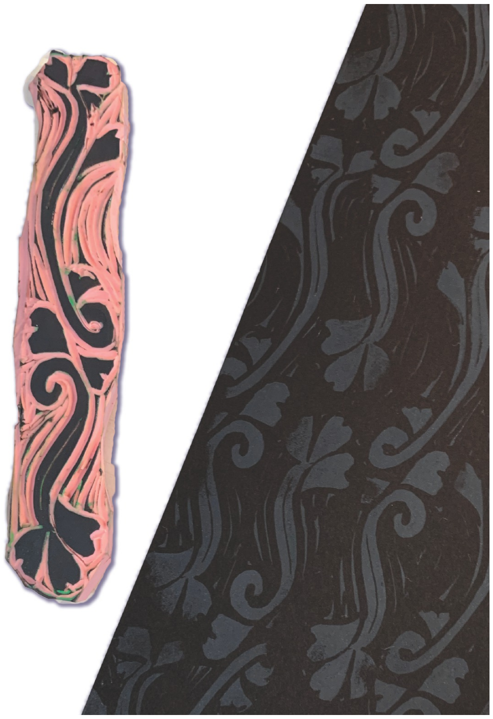


Figure 2.38 *The floral heart stamp is designed so the image does not go to the edge, which allows for a random repeating pattern. It is easy to design this way because you do not need to worry how each end will connect.*

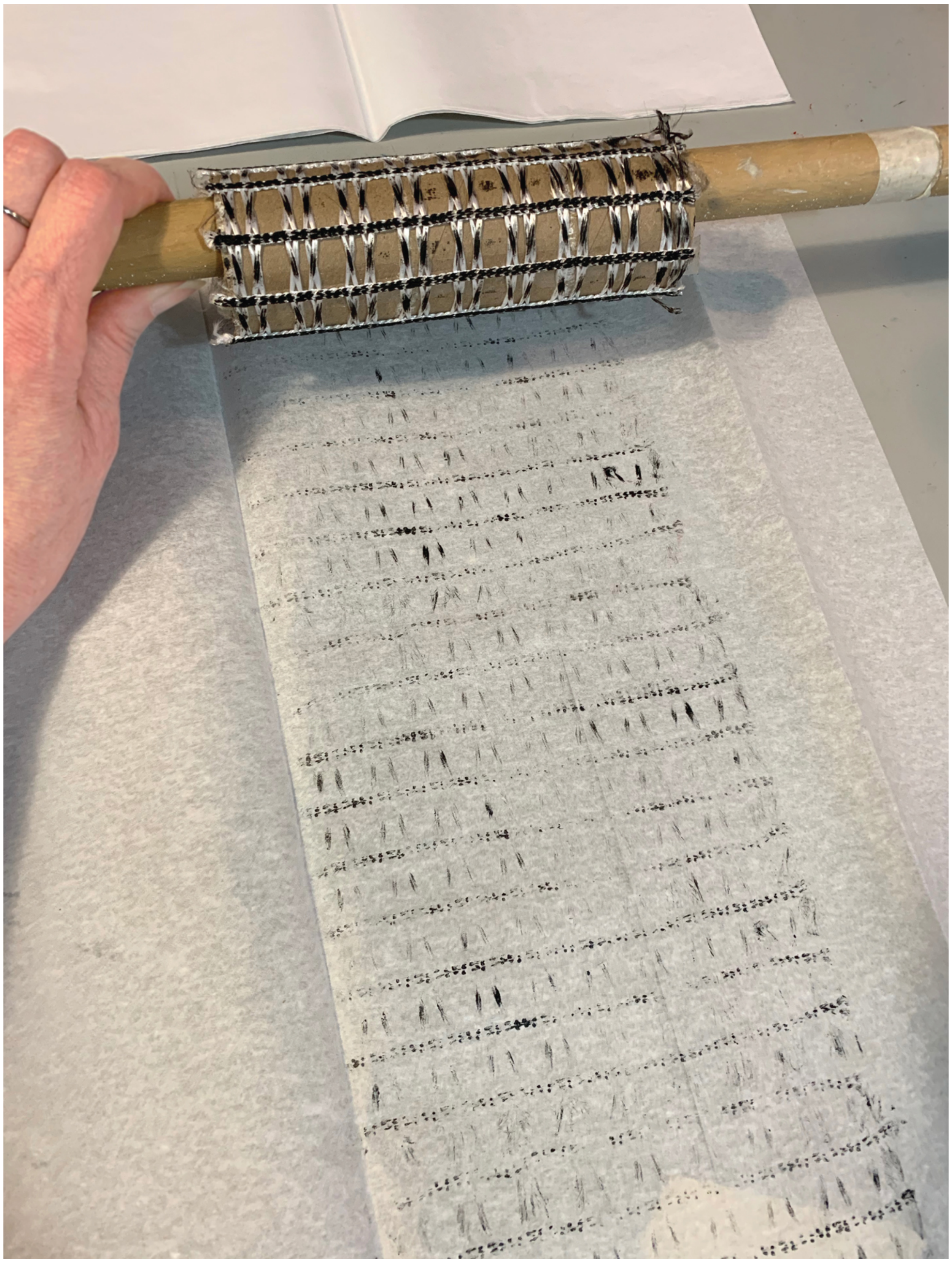


Figure 2.39 ***Printing with a rolling tube***

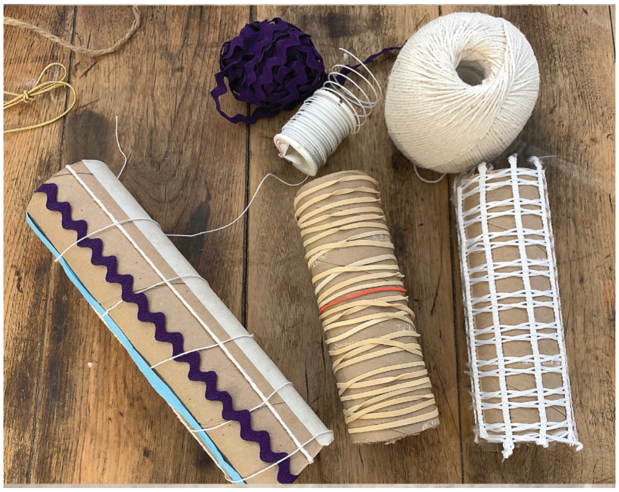


Figure 2.40 ***Rolling tubes made from cardboard tubes, rubber bands, string, and fabric***

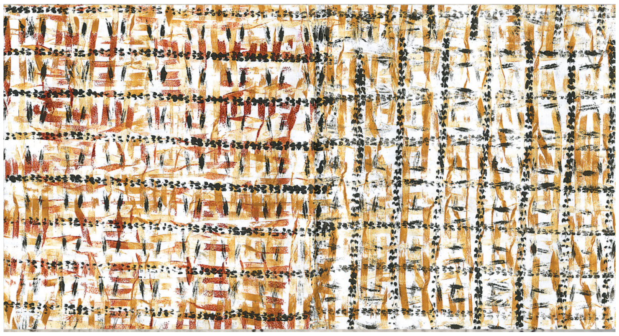


Figure 2.41 ***Print made with different tubes and colors***

Making a Rolling Tube

You can create repeating patterns and textures by creating a simple rolling tube made out of paper towel, toilet paper, or printing paper cardboard tubes. Wrap rubber bands, string, and yarn, or glue on shapes made from paper, craft foam, or other found objects. Options are endless. Attach items with glue. Roll out ink. Using some kind of dowel or handle, insert it into the tube and roll over the ink, then over the surface to print. (Figure 2.39) Press down firmly and use even pressure. Repeat and print. This works wonderfully for large surfaces like wrapping paper or a tablecloth.

Printing with Produce

There is much more to printing with produce than the famed potato stamp you might have made in elementary school. So many fruits and vegetables are ready-made sources for beautifully stamped prints that offer a variety of textures and patterns. Use leftover produce from the refrigerator or the garden, or shop for exotic fruits and veggies at the grocery store. You will want something firm that has an interesting pattern and that you can securely hold. Citrus such as lemons, limes, and oranges will print detailed patterns that resemble watercolor paintings. Star fruit makes it easy to create detailed textures in a fun shape. Peppers take ink especially well, but be careful with hot peppers like jalapeno because the oil may burn your hands. Onions, cabbage, and lettuce make beautiful patterns too. Experiment and discover what produce prints well for you.

Tips for Printing with Produce

Slice your produce cleanly, so the surface is flat with no dips or rough edges. Leave enough to grip securely when stamping, or you could easily drop the object and leave inky unplanned marks, or your fingerprints may show up on the edges.

Let sliced citrus and other moist vegetables like cucumber sit for at least an hour before printing. This will allow the surfaces to dry, and you will get better details in the print. You also can dab with paper towels to absorb excess moisture.

- If you are using produce that easily wilts, like lettuce, print with it right away or keep it in the refrigerator and take out only as you need it.
- If using hot peppers or anything that irritates your hands, wear gloves.
- Keep your printing produce for up to at least a week and reuse it. There is no need to clean it. Just slice off the end when you're ready to print again.

We will be printing flour sack towels with produce— a natural for the kitchen! (Figure 2.43)

Figures 2.42 & 2.43 *Produce, and produce printed on a flour sack towel.*

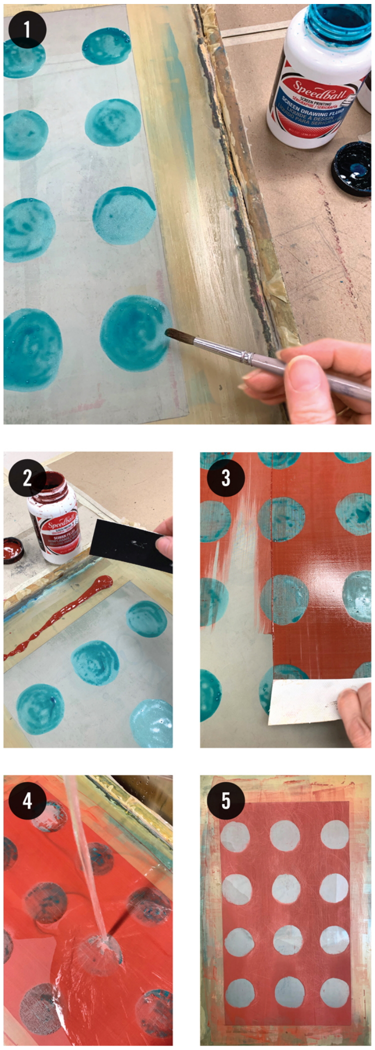
Sketch to Screen

Preparing images as a stencil for screen printing is a positive printing process, and there is no need to flip the image. For the projects in this book, we will examine how to cut stencils, paint stencils, and apply a simple photographic exposure process using the sun.

Temporary stencils can be cut out of paper, taped to the screen, and printed. The stencil on the screen allows the ink to go through the open areas of the design and keeps it from reaching the printing surface through the blocked areas. Paper stencils last for only one printing session. You can make a longer-lasting stencil with clear adhesive shelf-liner paper. It will withstand water cleanup and multiple print sessions. Masking and painter’s tape also work well for creating a stencil.

Another stencil method is painting with Speedball screen drawing fluid and filler. This process allows you to paint on your image in the positive and block out the nonprinting areas with filler. The drawing fluid gets washed out, which leaves the open stencil. The filler will clean out of the screen, allowing you to reuse it over and over again. (Figures 2.44–2.48)

Because ink might squeeze out beyond your stencil, close to the outside edge of the screen fabric, a good idea is to paint a permanent watertight border using a thick polyurethane, which you can see on the frame in Figure 2.47. That way you will not have to tape out the frame edges for each print session in order to prevent ink leakage.



Figures 2.44–2.48 *(1–5)*

1. Painting on the design with drawing fluid.

2 & 3. Carding screen filler to mask the nonprinting areas.

4. Drawing fluid is then washed out.

5. The open stencil is ready for printing.

Note the permanent polyurethane border used rather than masking tape.

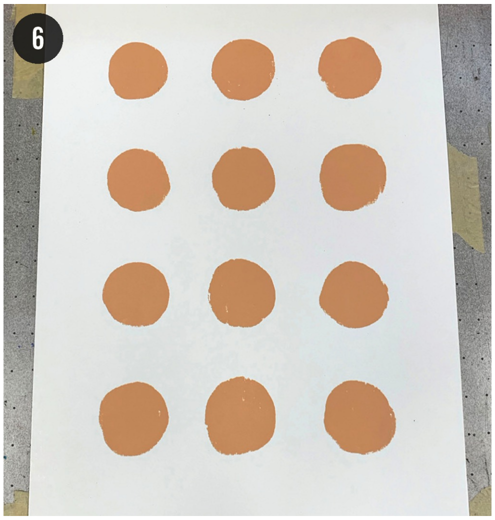


Figure 2.49 *(6) First color is printed. Lighter colors in the background are printed first.*

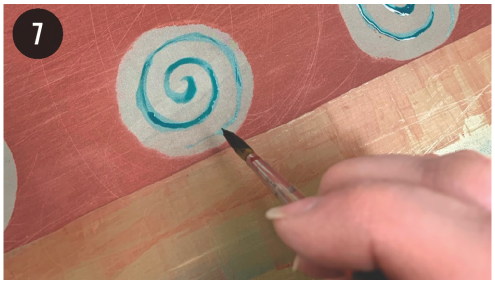


Figure 2.50 *(7) The second color, brown for the cinnamon, is painted on the screen.*

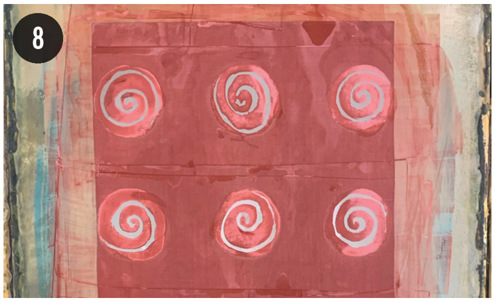


Figure 2.51 *(8) Filler is applied so only the swirl prints. The washout and printing process is repeated for each color.*

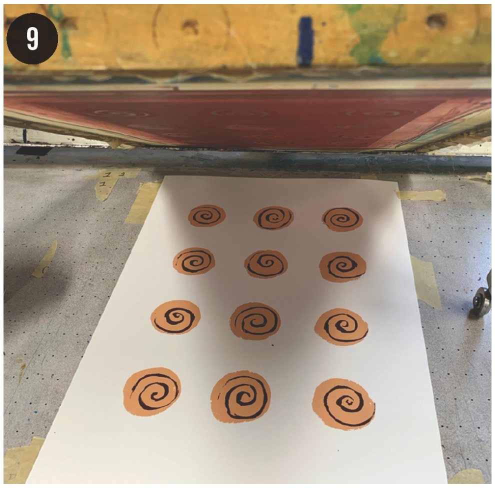


Figure 2.52 *(9) The second darker color is overprinted on the lighter color. To add the icing shown on the left, the screen filler was removed from the circles and new swirls were painted in.*

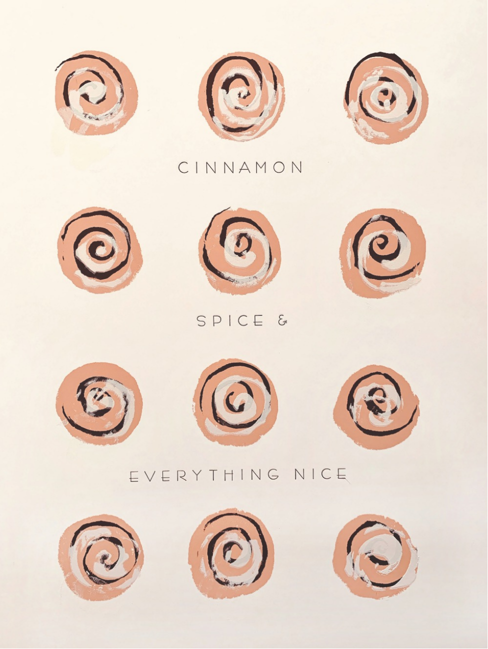

CINNAMON
SPICE &
EVERYTHING NICE

Figure 2.53 *The final print uses three colors from this painted stencil process. The type was letterpress printed.*

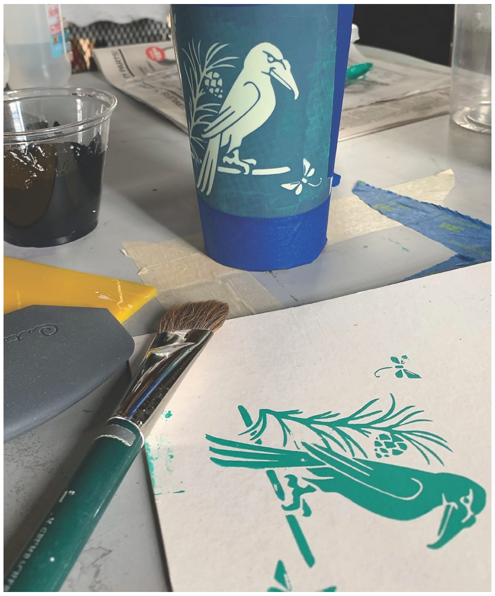


Figure 2.54 *EZScreen stencil ready to be printed on a mug. Because there is no screen frame, the stencil can be used on curved objects.*

EZScreenPrint

EZScreenPrint is a do-it-yourself photographic stencil process that is inexpensive and does not require much space or setup. There is no need to buy a screen frame, photo emulsion, emulsion cleaner, printing clamps, and lights. You can purchase light-sensitive sheets directly from EZScreenPrint and expose with a homemade exposure unit using sunlight. The emulsion sheets come with detailed instructions and test strips. Always do a test to check your exposure!

To make your own exposure unit, you will need:

- black foam board;
- black felt;
- acrylic sheet; and
- binder clips.

Cut everything to the same size so it is easy to clip together. I recommended 8½" x 11" unless you want to work bigger. Spray mount the black felt to the black foam board. That is it! You now have an exposure unit for use with the sun. (Figure 2.55)

Steps to Make an EZ Stencil

1. Print or draw your art on transparency film.
2. Place your transparency on the felt board. (Figure 2.56)
3. In subdued light, take out your EZ film stencil and peel off the clear film.
4. Place the film stencil, shiny side down, on your art and put the acrylic sheet on top. (Figure 2.57)
5. Flip over to protect from the light and place binder clips on all four sides, making sure it is tight for clean contact between film and art. If it is not tight enough, the image edges will be soft. (Figure 2.58)
6. Now, cover the top, so no light gets to the image as you walk outside to expose it.
7. Expose your stencil in direct sunlight for one minute. (Figure 2.59) It can not be cloudy or too early or too late in the day. Ideally it should be when the sun is the highest in the sky.
8. Now cover your image, take it inside, and place the stencil in a small tray of cool water, and leave it for fifteen minutes. A bathroom with subdued light works. Keep the image away from bright light.
9. Gently shake the tray and you will see the emulsion wash out into the water. (Figure 2.60) Gently rinse off, so you do not damage the surface.
10. Gently blot dry with a paper towel.
11. Leave on the paper towel, and place out in direct sun for ten minutes to harden the emulsion. (Figure 2.61)

The directions in chapter 5 will cover printing and more stencil processes specific to the projects.

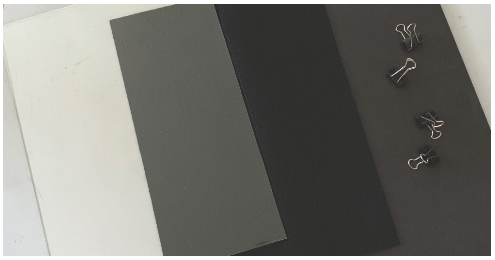


Figure 2.55 *Make your own exposure board with acrylic, felt, board, and binder clips.*

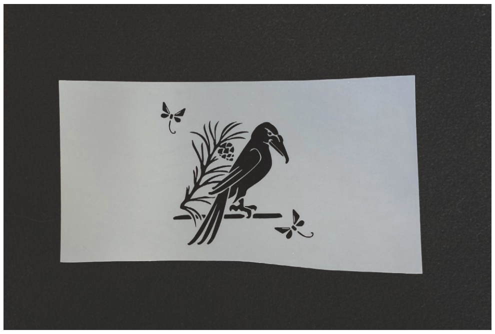


Figure 2.56 *Transparency art on black felt board*

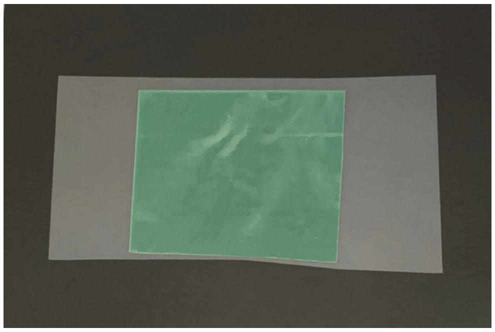


Figure 2.57 *Transparency is on the bottom, then the film stencil, and finally the acrylic sheet.*

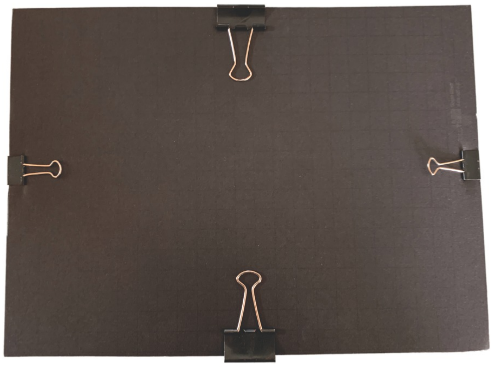


Figure 2.58 *Flip over and secure with binder clips or small clamps.*

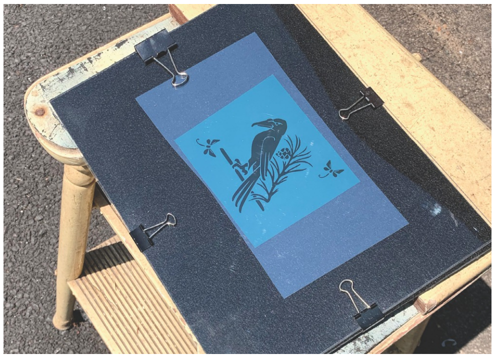


Figure 2.59 *Expose for one minute in the bright sun.*

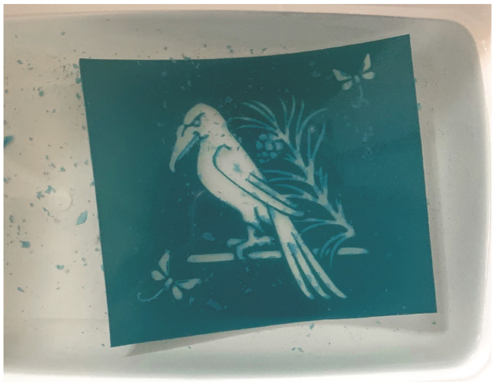


Figure 2.60 *Place in a tray of cool water and let sit for fifteen minutes. Gently rinse out.*

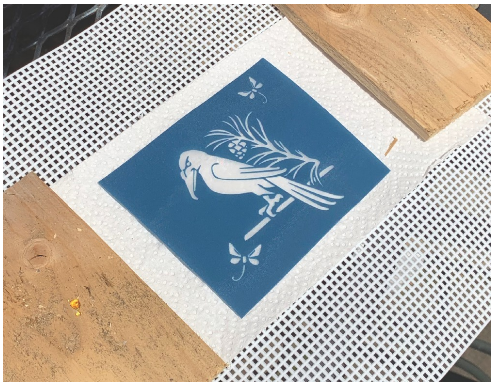
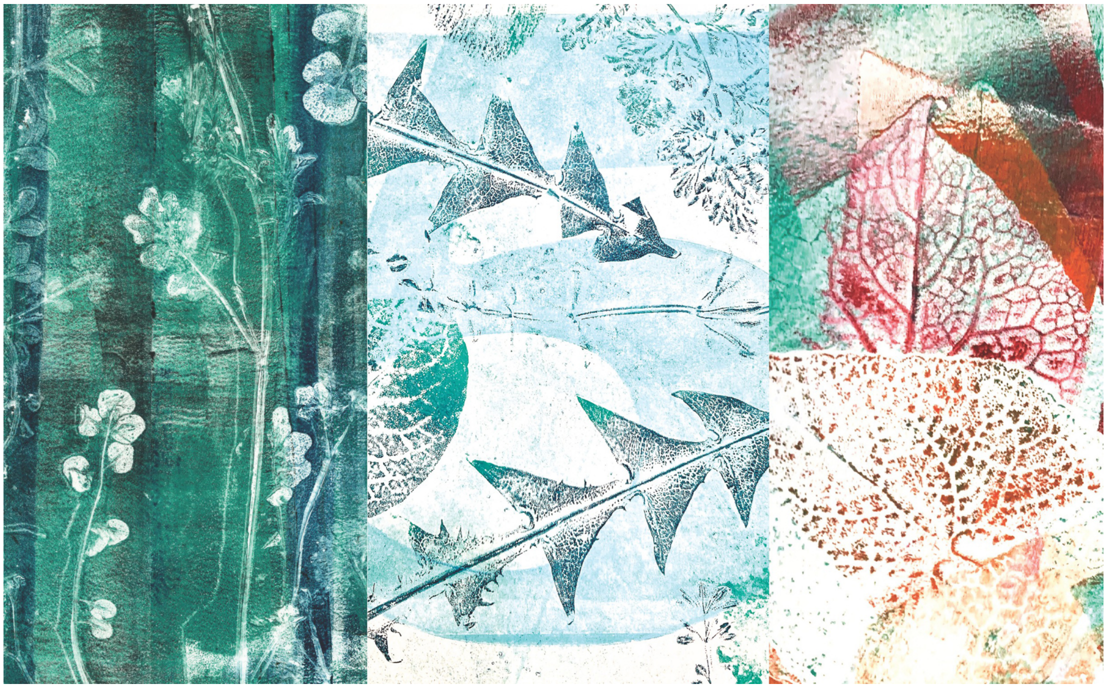


Figure 2.61 *Place back out in the sun for ten minutes to cure the stencil. You can use a paper towel and plastic needlepoint grid or window screen for support.*



Figures 2.62, 2.63, 2.64 *Gel monoprints using leaves and plants are easy, quick, and fun.*

Gel Plates

Gel, “gelli,” or gelatin plates are very popular with all levels—from kids to experienced fine artists. They are great for workshops, in the classroom, or for home printing. They can be used to make single prints or as a stamp for larger prints. Gelatin plates have been around for many years and are easily and inexpensively made with unflavored gelatin, water, and glycerin. Commercial gel plates do not contain gelatin but mimic its qualities and provide a superior printing surface. (Figure 2.65)

Having tried both types of plates, I find commerical gel plates have better quality control and crisper images, and are easier to ink with solid coverage. Homemade gelatin plates have their benefits though. They offer a more painterly approach, allow you to mold your plates into any shape or size (Figure 2.66), and are easily affordable. Another nice thing about gel plates is if they get damaged, simply cut up in pieces, melt in a microwave for a minute, and pour back in a pan to reform.

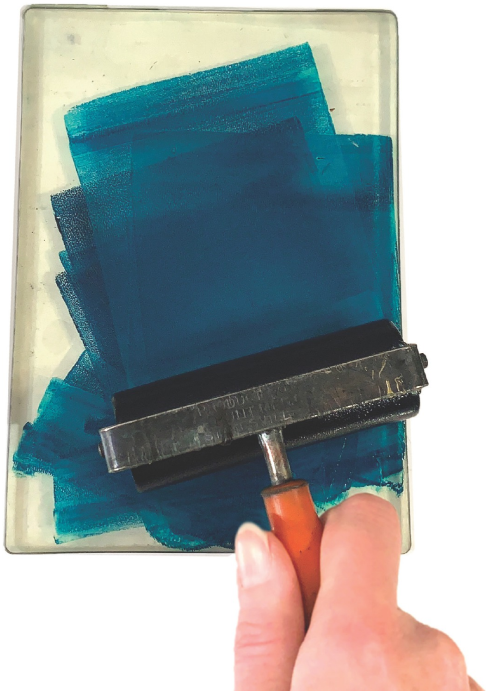
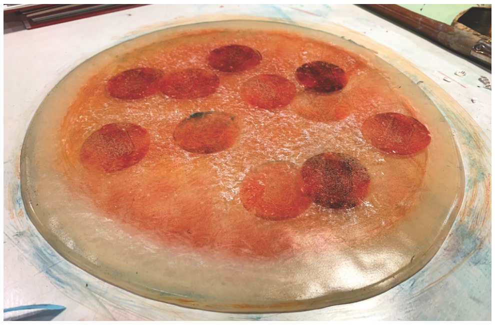


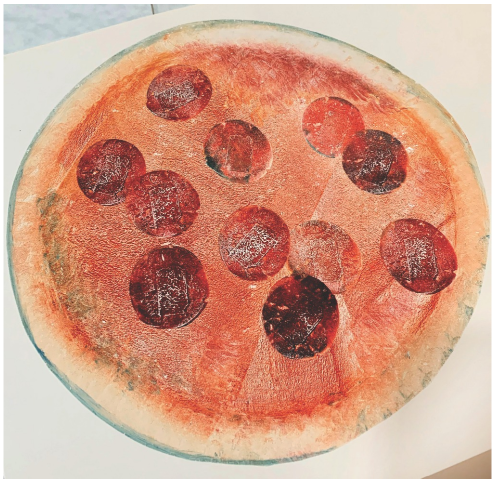
Figure 2.65 *Commercial gel plates come in small to large sizes.*

Making Your Own Gel Plate

There are various gel plate recipes online, and after trying a few, I found this mixture to work very well, resulting in a smooth, solid surface. I was able to make a small cookie sheet and a pizza pan size. You can cut this recipe in half if you just want one smaller plate.

Because of the glycerin in the recipe, the plates will last for months with no need for refrigeration. You can find glycerin in the pharmacy or beauty section, usually by the lotions. If you have ever made Jell-O, you will have no trouble making a gel plate.





Figures 2.66 & 2.67 *Homemade gel plates allow you to make any shape or size. In this example, a small pizza pan was used as the mold. Naturally, a pizza print was made from it. (Art by Ashley Kujat)*

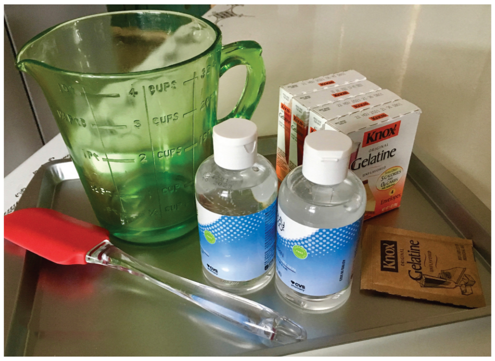


Figure 2.68

Supplies

- ☐ two six-ounce bottles of glycerin
- ☐ eight one-ounce packets of Knox unflavored gelatin (Knox comes in a box with four one-ounce packets. Buy two boxes.)
- ☐ 1½ cups of boiling water
- ☐ a few strips of newsprint or copy paper
- ☐ metal or glass baking pans
- ☐ acetate (to store the plates)

Directions

Use a small cookie sheet, a pizza pan, a square cake pan, round cake pans, or even muffin pans to form your plates. Generally, anything with a smooth bottom and shallow sides to form a sheet of gelatin will work.

The thicker the gel plate, the sturdier and longer it will last. You can get away with a half-inch-thick sheet, but it will tear eventually and you will need to reheat and reform it.

- Boil 1½ cups of water.
- Put the two bottles of glycerin in a glass bowl. Slowly stir the eight packets of gelatin into the glycerin.
- Add the boiling water, and slowly stir until the gelatin is dissolved. Pour the hot gelatin mixture into your pans.
- If you stir too quickly, you will get bubbles and foam. Pop large air bubbles. Remove surface bubbles or foam by dragging the edge of a strip of paper across the surface.
- Let the gelatin set for a couple of hours or overnight. If you have any gelatin buildup at the edges from dragging paper over the surface, you can trim it off with a knife. Or you can use the other side of the plate because it will be perfectly smooth.
- Gently pull the plate out of the pan to use. To store, place between two sheets of acetate.

After printing, clean only with cool water and mild soap. For stubborn inks, use baby oil. Cleaning with hot or even warm water will melt the plate.

In case of damage or if you want to make a different-sized plate, tear it up into chunks and place in a glass bowl. Heat for thirty-second intervals, stirring each time. It should completely melt in about two minutes, depending on your microwave's power. Then repour the plate.

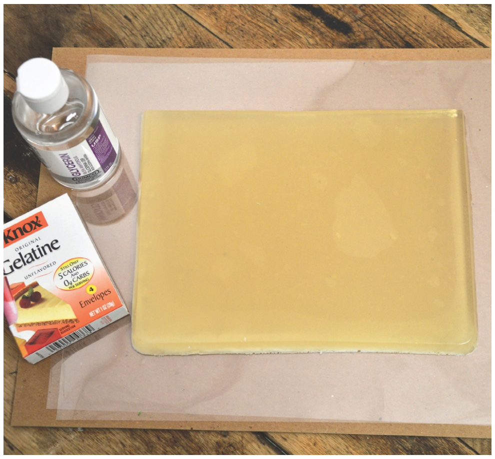


Figure 2.69 *The finished plate*

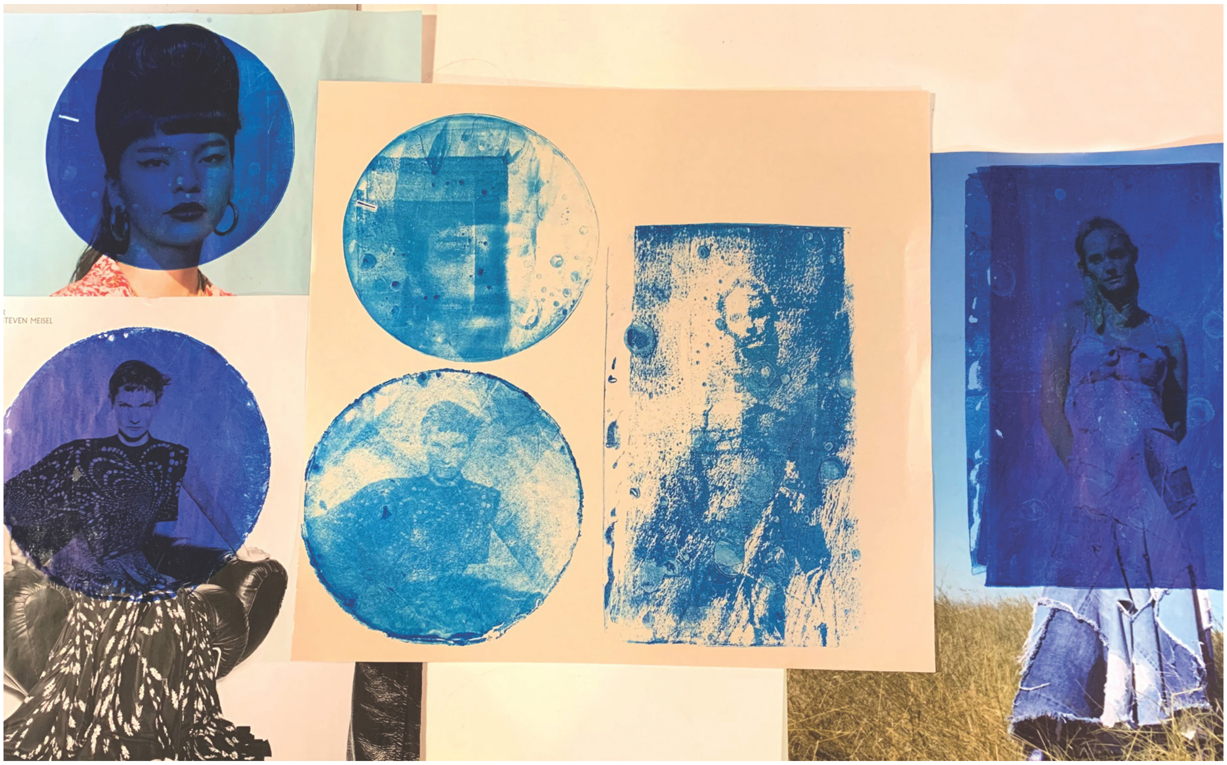


Figure 2.70
Image transfers are a fun use of the gel plate. High-fashion magazines with slick pages, like Vogue, *work well. A handmade circle gel plate and a commercial gel plate were used in this example. We will learn how to do this in a chapter 3 project.*

COLOR

Mixing Ink

Picking and mixing the right color for your print project can define the mood, style, and meaning of your design. I will keep to the basics because color theory and color mixing can be an involved topic, and there are many online color resources for reference. My favorite for developing color themes is Adobe's interactive color wheel at https://color.Adobe.com.

There is no need to buy every premixed color available from whatever brand you choose because the primary colors of red, yellow, and blue will get you on the path to mixing most of the colors you need.

I recommend starting with the first five listed below. (Figure 2.71) Then try any of the last five colors if you have trouble mixing what you want.

1. **Red (primary)**
2. **Yellow (primary)**
3. **Blue (primary)**
4. **Black (makes darker shades)**
5. **White (makes lighter shades like pastels)**
6. Brown (hard to mix a good brown)
7. Purple (hard to mix a bright shade, tends to get muddy)
8. Viridian green (mixes with white to make a nice teal or aqua) (Figure 2.76)
9. Prussian blue (makes a nice navy)
10. Yellow ochre

There are, of course, different shades of these colors within the same ink brand or across brands. You will see variations in shades such as:

- reds that are warm and lean more towards orange or reds that look more pink like magenta (Figures 2.73 & 2.74);
- blues that are light to dark. Cyan is light and bright and will give you brighter colors when mixed. Ultramarine blue is darker and will tone down colors when mixed;
- yellows that are bright like a lemon or more golden such as ochre (Figure 2.72); and
- black that is warm and looks brownish or black that is cool and can look bluish.

When it comes to purchasing colors and all the variations, buy what you think you will use most, keeping in mind that black and white inks are required to darken and lighten shades.

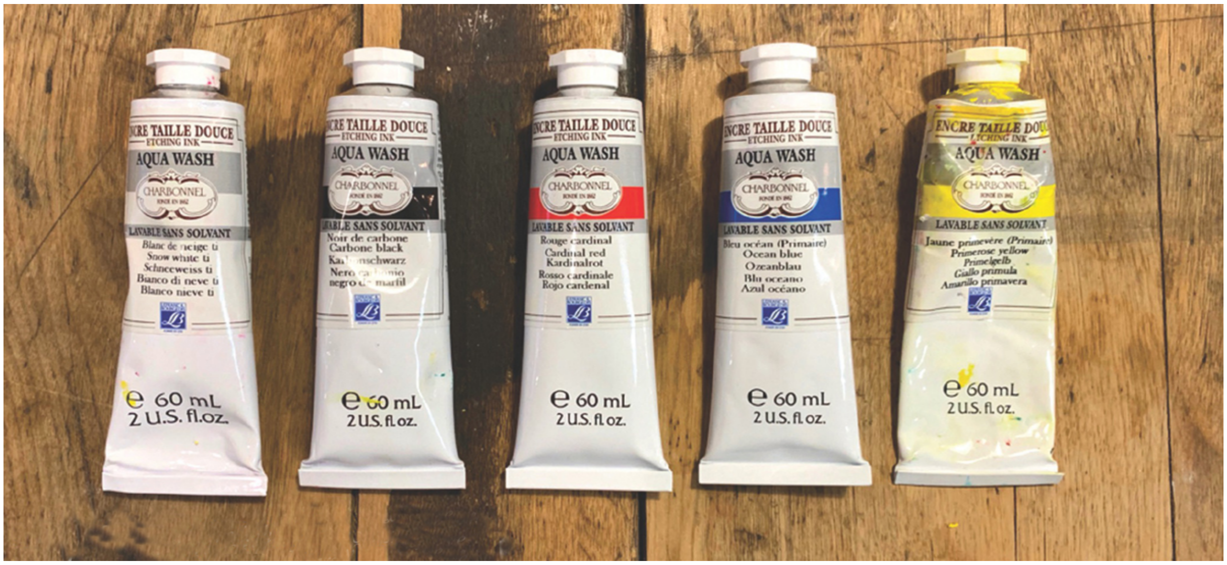


Figure 2.71 *The five ink colors you should have.*

Ink Properties

Another important quality of ink is its opacity or transparency. Keep this in mind when printing and the order you print inks.

- Black is opaque (dense coverage) and will cover ink colors below it. So usually it is the last color printed.
- Yellow is very transparent and will mix with colors printed on top of or below it, i.e., yellow over blue makes green. Yellow and other light colors are usually printed first.
- White is somewhat opaque but not completely when printed on top of a dark color or on dark paper. Adding white to a color will make the color more opaque.
- Printing different shades on top of each other can result in additional colors and a rich palette. But you have to be careful because too many overlapping colors can get muddy and you might lose image detail.
- When mixing pastels or light colors, always start with white and add small amounts of color to it. (Figure 2.76)

- When mixing a color with black, add very small amounts of black gradually to your color. Otherwise, black will become the predominant shade.

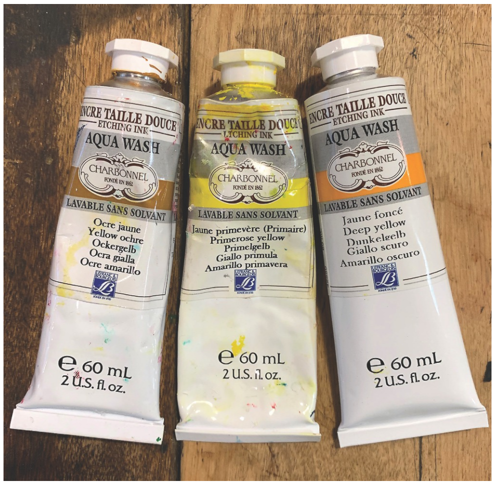
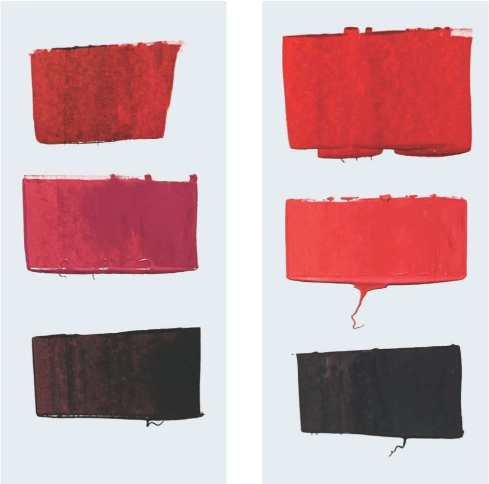

ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
LAVABLE SANS SOLVANT
Ocre jaune
Yellow ochre
Ockergelb
Ocra gialla
Ocre amarillo
60 mL
2 U.S. fl. oz.
ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
LAVABLE SANS SOLVANT
Jaune primevère (Primaire)
Primerose yellow
Primelgelb
Giallo primula
Amarillo primavera
60 mL
2 U.S. fl. oz.
ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
LAVABLE SANS SOLVANT
Jaune foncé
Deep yellow
Dunkelgelb
Giallo scuro
Amarillo oscuro
60 mL
2 U.S. fl. oz.

Figure 2.72
Three different types of yellows will give you very different results. If you are buying only one yellow, buy the brightest one because it will be best for mixing with other colors.



ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
LAVABLE SANS SOLVANT
Rouge géranium (primaire)
Geranium red
Geraniumrot
Rosso geranio
Rojo de geranio
60 mL
2 U.S. fl.oz.
ENCRE TAILLE DOUCE
ETCHING INK
AQUA WASH
CHARBONNEL
LAVABLE SANS SOLVANT
Rouge cardinal
Cardinal red
Kardinalrot
Rosso cardinale
Rojo cardenal
60 mL
2 U.S. fl.oz.

Figures 2.73 & 2.74
Here is an example of two reds, geranium and rouge cardinal, that at first glance you might not think it matters which one to use. The top color swatches are the colors straight out of the tube. The middle swatches have white added, and this is where the differences become obvious. Geranium is more pink, and rouge cardinal is more orange. When black is added, they shift toward very dark purples, almost brown, and do not look much different.

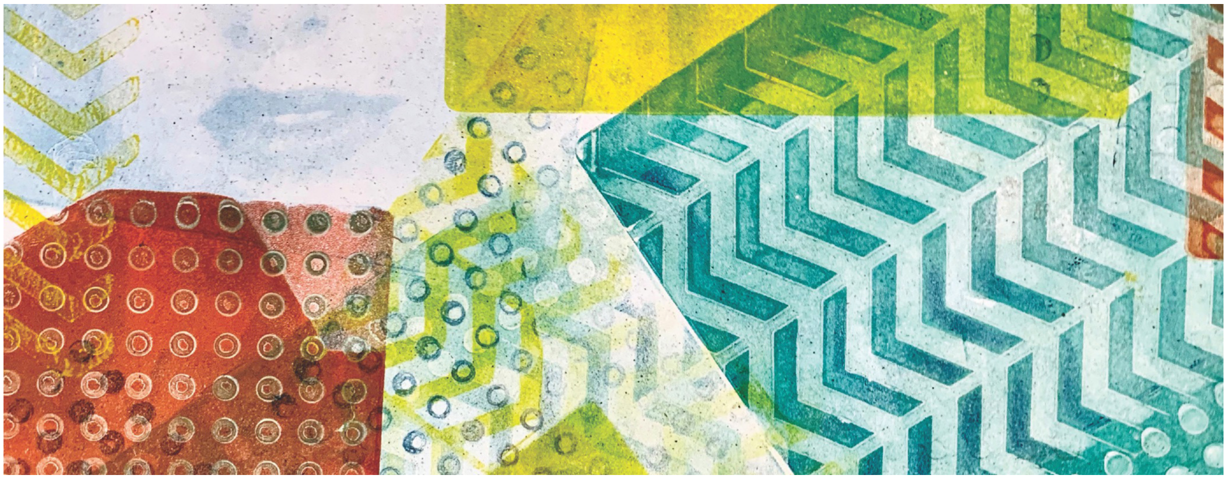


Figure 2.75
Notice how certain colors like yellow are more transparent than the red. Where the yellow and teal overlap, a new greenish-yellow color is created. Look carefully at the print where colors overlap and note what happens.

Testing Color

You will want to do a “draw down” to test your ink color. Take a very small sample of ink with a putty knife or your finger, and drag the ink down on a white piece of paper. (Figure 2.76) This will show the actual color of ink because it is hard to tell the exact color when mixing. If you are using a colored stock, then it is critical to test your ink because the color of the paper will shift the ink color, usually darker.

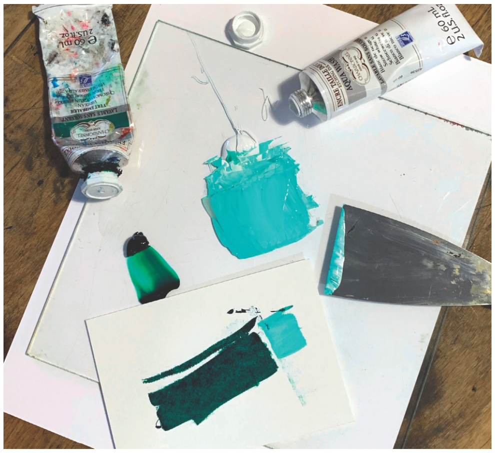


Figure 2.76
To mix the light-aqua color, a slight amount of the veridian-green was added to the white ink. Draw down swatches of the ink made with the putty knife are shown on the small card at the bottom of the photo.

Color Terms:

Primary Colors: red, yellow, blue

Secondary Colors: green, purple, orange

Complementary Colors: colors opposite each other on the color wheel, such as red and green, blue and orange, yellow and purple

Hue: the actual color such as blue, yellow, or red

Tint: adding white

Shades: adding black

Value: how light or dark the hue is

Saturation: the intensity of the color

Monochromatic: using only one color and values of that color

To learn more about the color wheel and discover color themes and palettes, visit Adobe’s Interactive Color Wheel at https://color.adobe.com.

CHAPTER 3

Printing with Found and Natural Objects

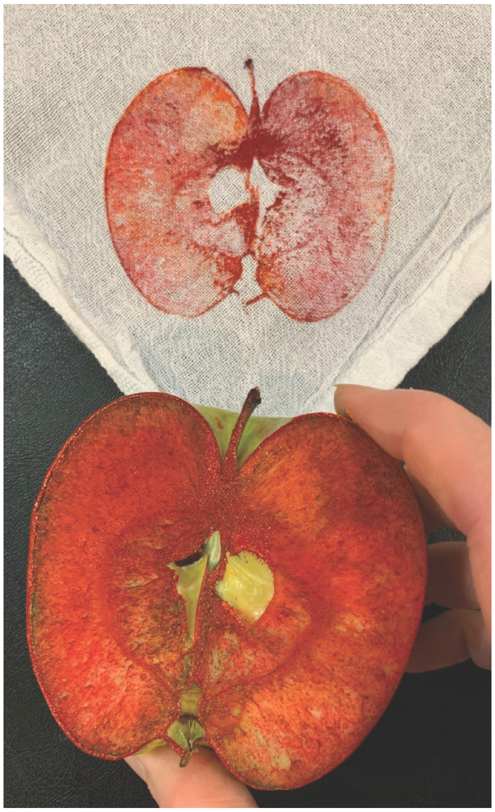


Figure 3.1 *Apple print on towel*

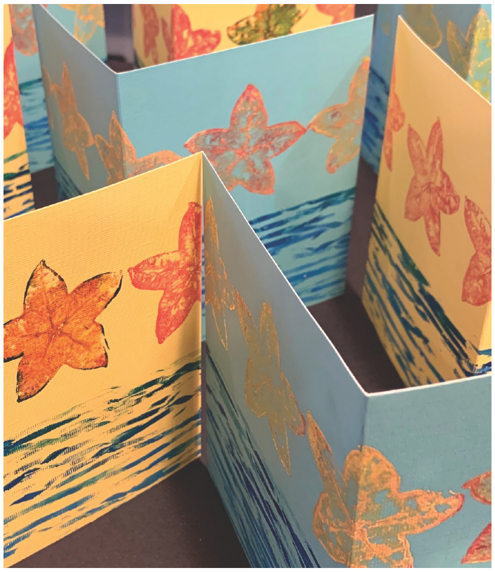


Figure 3.2 *Note cards made with tube roll and star fruit*

Project 1: Print with Found and Natural Objects to Make Paper Ornaments

Project 2: Print Flour Sack Towels with Produce

Project 3: Create a Set of Note Cards and a Belly Band

Project 4: Monoprinting with Gel Plates

These four projects are ideal for beginners, children, groups, crafters, and artists.

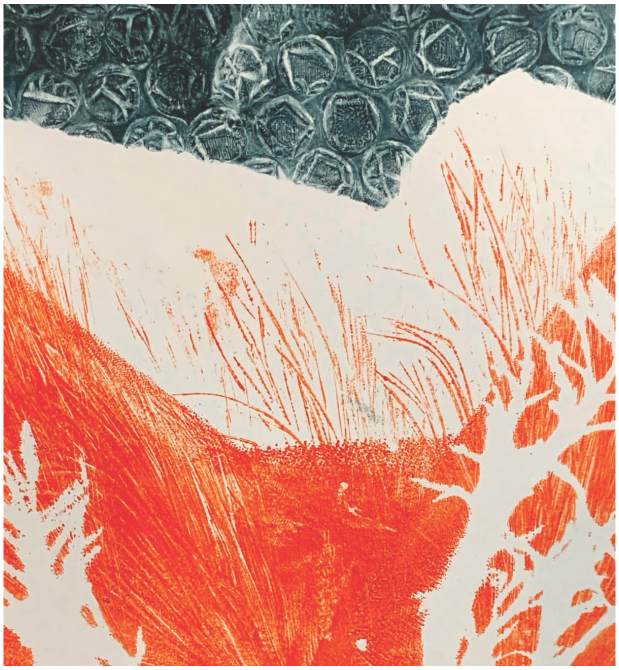
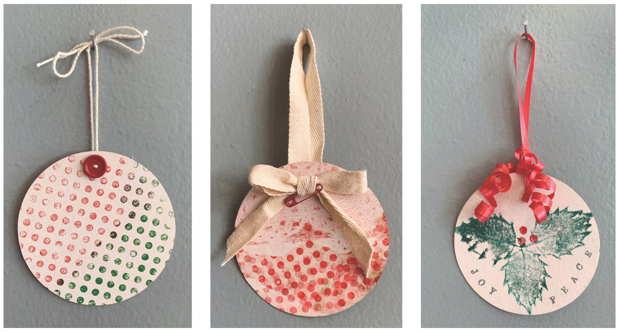


Figure 3.3 *Gel print made with bubble wrap and plants (Art by Maddy Jason)*



Figures 3.4–3.6 *Examples of stamped and brayer-rolled ornaments using household items, leaves from a holly bush, and pine needles. Make these for any occasion and use as gift tags too.*

PROJECT 1

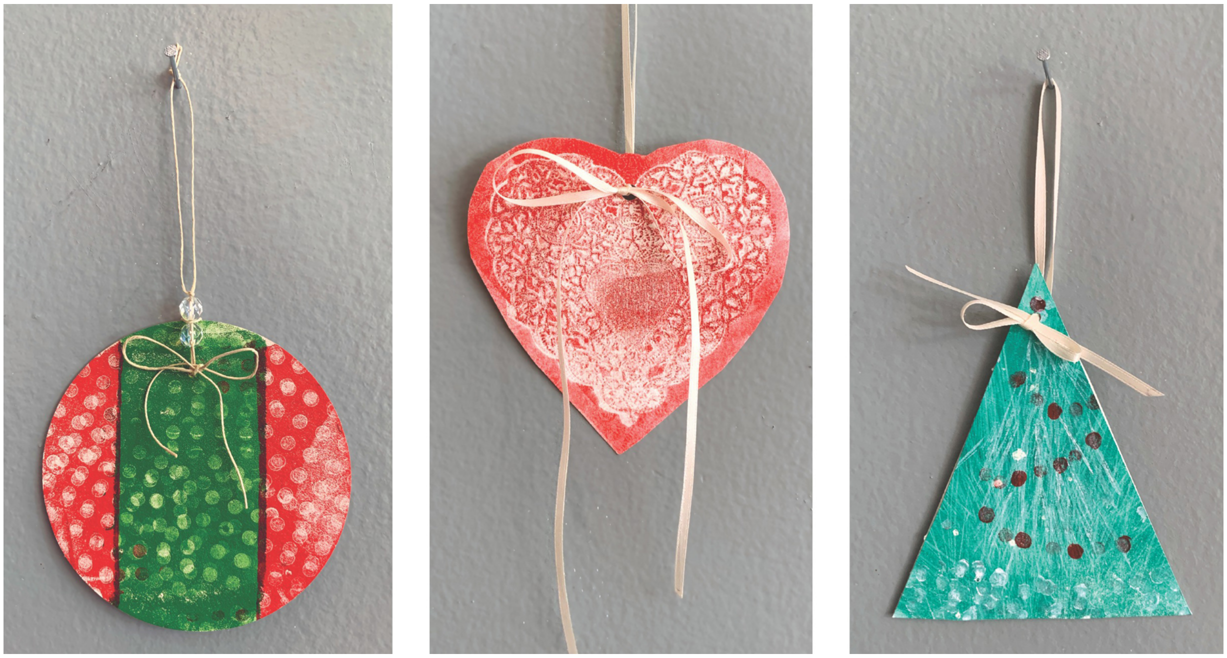
Print with Found and Natural Objects to Make Paper Ornaments

This easy-to-make project will get you comfortable with the printing process by inking found objects and pressing on to inexpensive coasters or other paper stock. Blank paper coasters are available at crafts stores or online. Other precut shapes are an option, or cut your own. Even craft foam shapes will work. The key is to have a surface that will easily take ink and allow you to punch a hole for hanging. You will explore how to get a range of impressions to create festive patterns and designs. As a

This fun project is great for a workshop or a family activity because it is perfect for the beginner and anyone who loves making things.

Supplies

- ☐ Ink: Speedball Relief Ink, Charbonnel Aqua Wash, or stamp pads
- ☐ Brayer for ink
- ☐ Inking surface
- ☐ Paper coasters, shaped craft foam, blank gift tags, or card stock cut into shapes cutters, string, chopsticks, etc.
- ☐ Found objects to print with: pencil with final step, we will add ribbon, wire, or string for hanging. unused eraser, corks, spool, cookie
- ☐ Ribbon, string, or wire for hangers
- ☐ Hole punch or awl



Figures 3.7–3.9 *(continued from page 45)*

ALPHABET STAMP SET
30 PIECES

Figure 3.10
Use rubber letter stamps as an easy way to add a message or name.

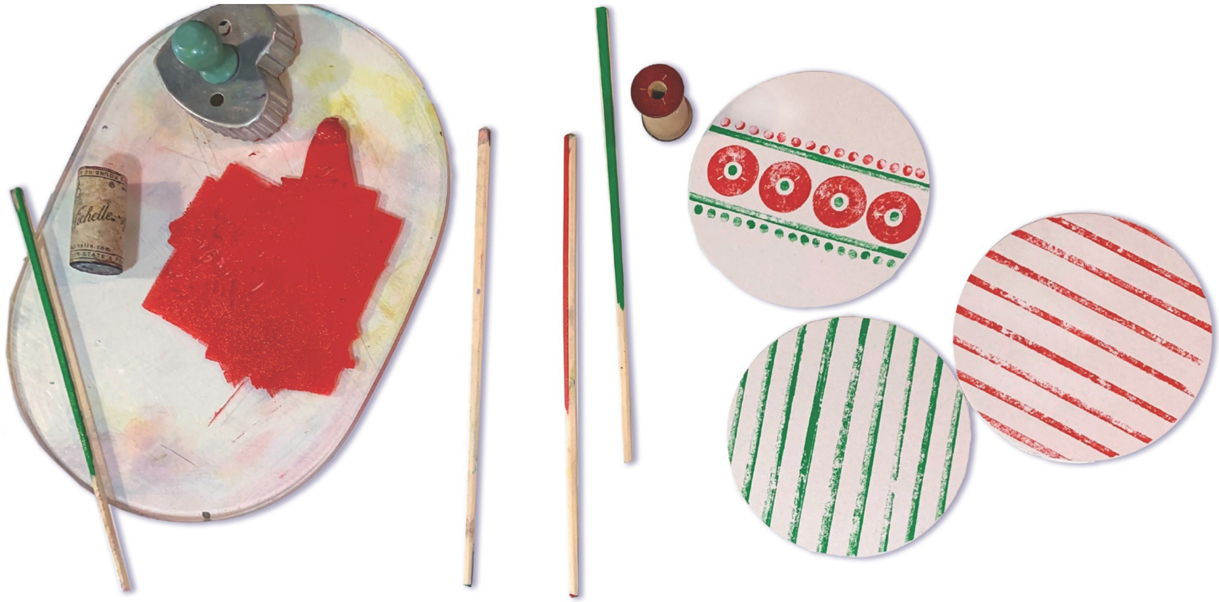


Figure 3.11
The sides of chopsticks were used to print the lines and the ends to stamp the dots. The larger circles were stamped with a wooden spool.

Directions

Step 1 Gather objects around the house that you do not mind getting ink on and what you think might make an interesting mark. Items used for this project include wine corks, thread spools, chopsticks, Styrofoam cups, a toy building block platform, holly leaves, and a white pine branch. Other items you might want to try are cookie cutters, plastic produce netting, and erasers on the end of pencils. Your options are limited only to what you find around your home. Experiment and have fun!

Step 2 Select ink and mix colors if needed. Use at least two for contrast. Obvious choices for Christmas are red and green. Blues are good for winter holidays. Silver and gold, while they may sound like good ideas, do not look metallic on absorbent paper like on a coaster. Try other ideas and pick springtime pastels for Easter, rose-red for Valentine's Day, and orange and black for Halloween.

Step 3 Ink up items and test print on scrap paper. Try inking objects either with a brayer or by stamping into the ink. Then print and compare which method works best. Some objects like wood do better with using the brayer to ink. Rubber and cork do well stamping directly into the ink.

Try overlapping impressions and watch how the colors interact. Try out patterns, rows, directions, and ink combinations until you find something you like. Then start printing on your coasters.

Step 4 There are two ways to approach printing methods for your objects. Stamping the object directly on the paper is the easiest method. You will need something to hold on to for applying pressure to make a good impression. For instance, the Styrofoam cup in Figure 3.12 is easy to hold on to whereas the fabric tree in Figure 3.13 is not.

TIP: Remember to keep baby wipes nearby to clean your hands often. These printing techniques can get messy, and it is easy to get ink on your project just by picking it up with inky hands.

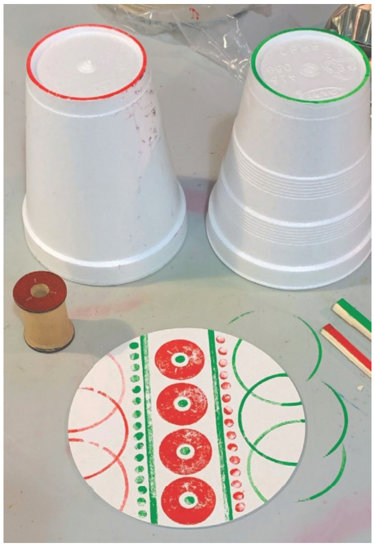
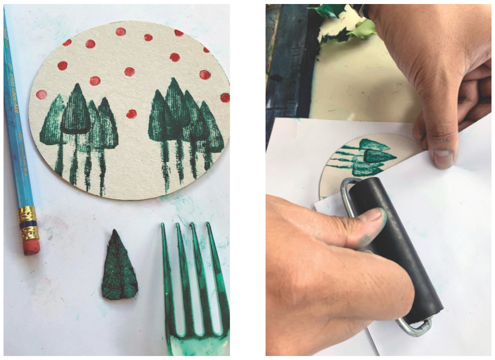


Figure 3.12
Styrofoam cups are an easy way to make circles by pressing into the rolled-out ink and stamping on the coaster.

If you do not have a way to hold on to the object, place a piece of paper over it and use a hard roller, a baren, or your hand to apply firm pressure to transfer the ink. By putting paper over the object, it is held in place and your hands and tools are protected from getting inky.

Experiment with the amount of ink on your printing object and how many impressions you can make before you have to reink. If you put too much ink, it will look squished and the impression will not be clear. Too little ink and you will lose detail.

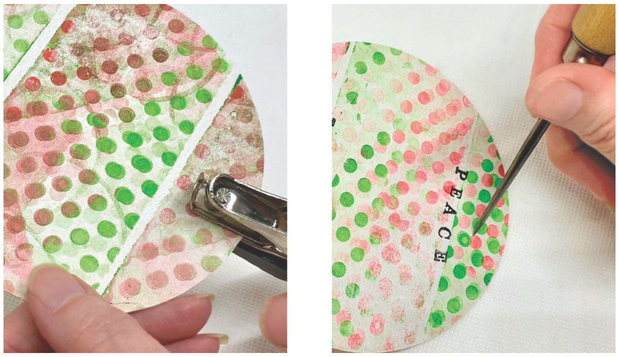
Step 5 Dry your prints. Because of the oil in Charbonnel inks, they need to dry overnight. If it is humid or there is heavy ink coverage, they will take longer, especially red ink. Speedball inks will dry much quicker, but let the prints sit for at least one hour before adding a hanger so as not to smear.



Figures 3.13 & 3.14
This design uses the tines of a fork for tree trunks, a piece of fabric for treetops, and the end of a pencil for dots. A cover sheet was used to hold the fabric tree in place while applying pressure with a hard roller to print.

Another factor in drying time is the paper. If you are using absorbent material like coasters or construction paper, the ink soaks into it and dries faster. If you are using shiny or coated paper, the ink sits on the surface, so it will take longer to dry.

Step 6 When dry, punch a hole for a hanger with a hole punch or an awl for heavy cardboard like coasters (Figures 3.15 & 3.16). Put a ribbon, string, or wire through the hole for hanging.



Figures 3.15 & 3.16 *Use a paper punch to make a hole for a hanger. If a paper punch will not cut through heavy paper, use an awl. An awl looks like a screwdriver, but it has a sharp tip that can easily poke through heavy paper.*

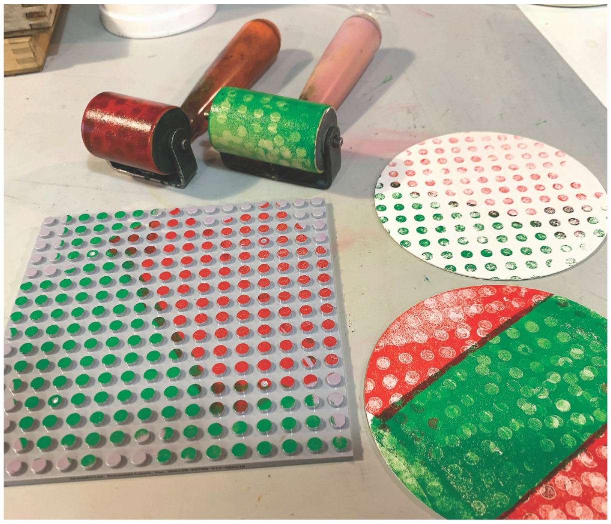
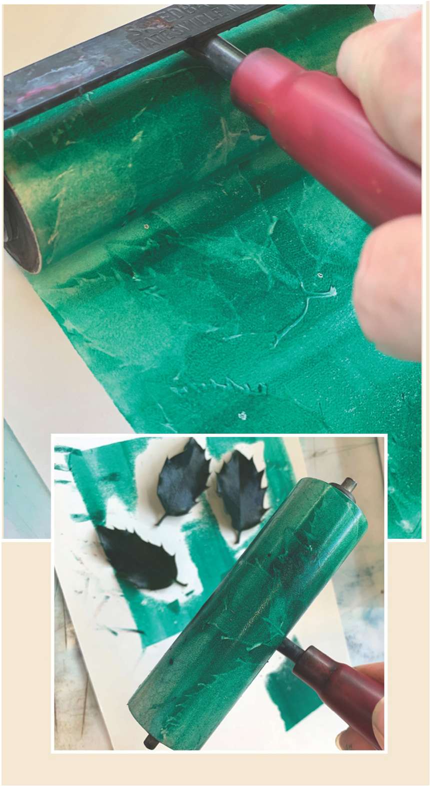
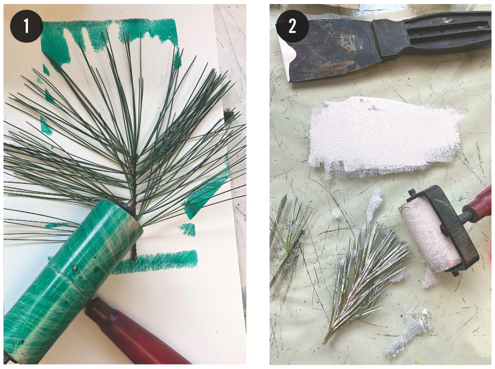


Figure 3.17
As you are experimenting, the unexpected or "happy accidents" may occur, such as this dotted pattern on the roller. As the roller picks up ink from a plastic toy, it leaves an interesting pattern, which can be rolled on to the coaster as shown.



Figures 3.18 & 3.19
The same image-transfer technique works with natural objects too. After inking the holly leaves, a collaged impression is left on the roller, which was then rolled directly on the paper, leaving a beautiful print.

Make a Tree-Shaped Ornament with Nature



Figures 3.20 *(1)* **& 3.21** *(2)*
White pine needles are inked up with a brayer, leaving a pattern on it that will be rolled on to paper. A smaller branch is inked up with white to be pressed on top of green to create a small tree.

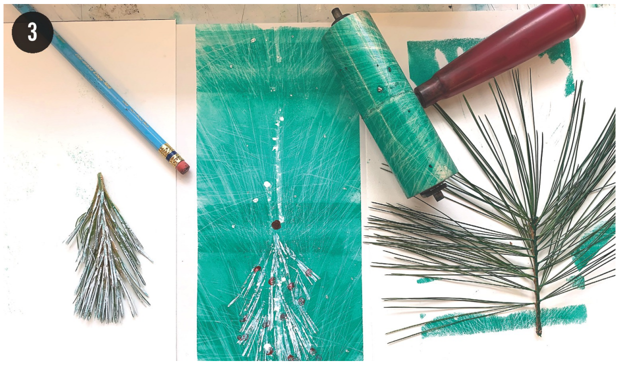


Figure 3.22 *(3)*
The print in the middle shows the pattern printed from the brayer and then the white inked branch was firmly pressed over the green. Finally, an eraser on the end of a pencil was stamped into red ink and then on the tree to create the dots. As a final step, white ink was dotted on for snow. (See the final ornament, Figure 3.9.)

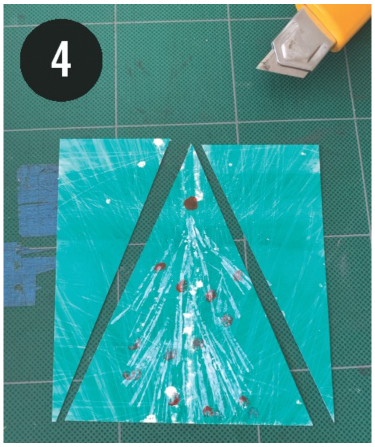


Figure 3.23 *(4) After the ink completely dried, a tree shape was cut out with a ruler and blade, starting from the corners to the center of the paper, which is the top of the tree. Make sure to measure the center, so you end up with even leftover triangles.*

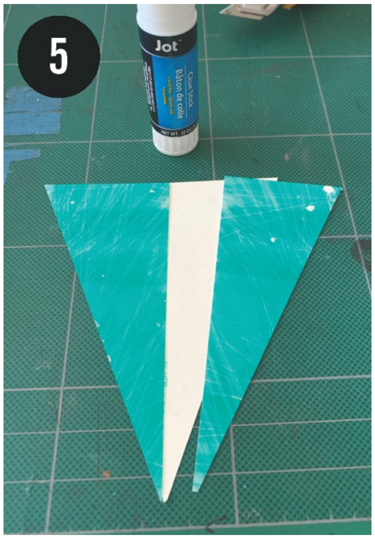


Figure 3.24 *(5) Glue the leftover triangles on the back of the tree so you have a two-sided ornament.*

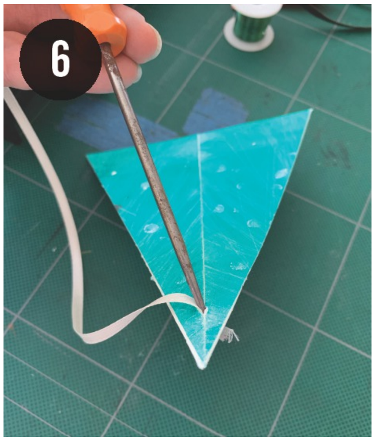


Figure 3.25 *(6) Use an awl to poke a hole and to thread the ribbon through.*

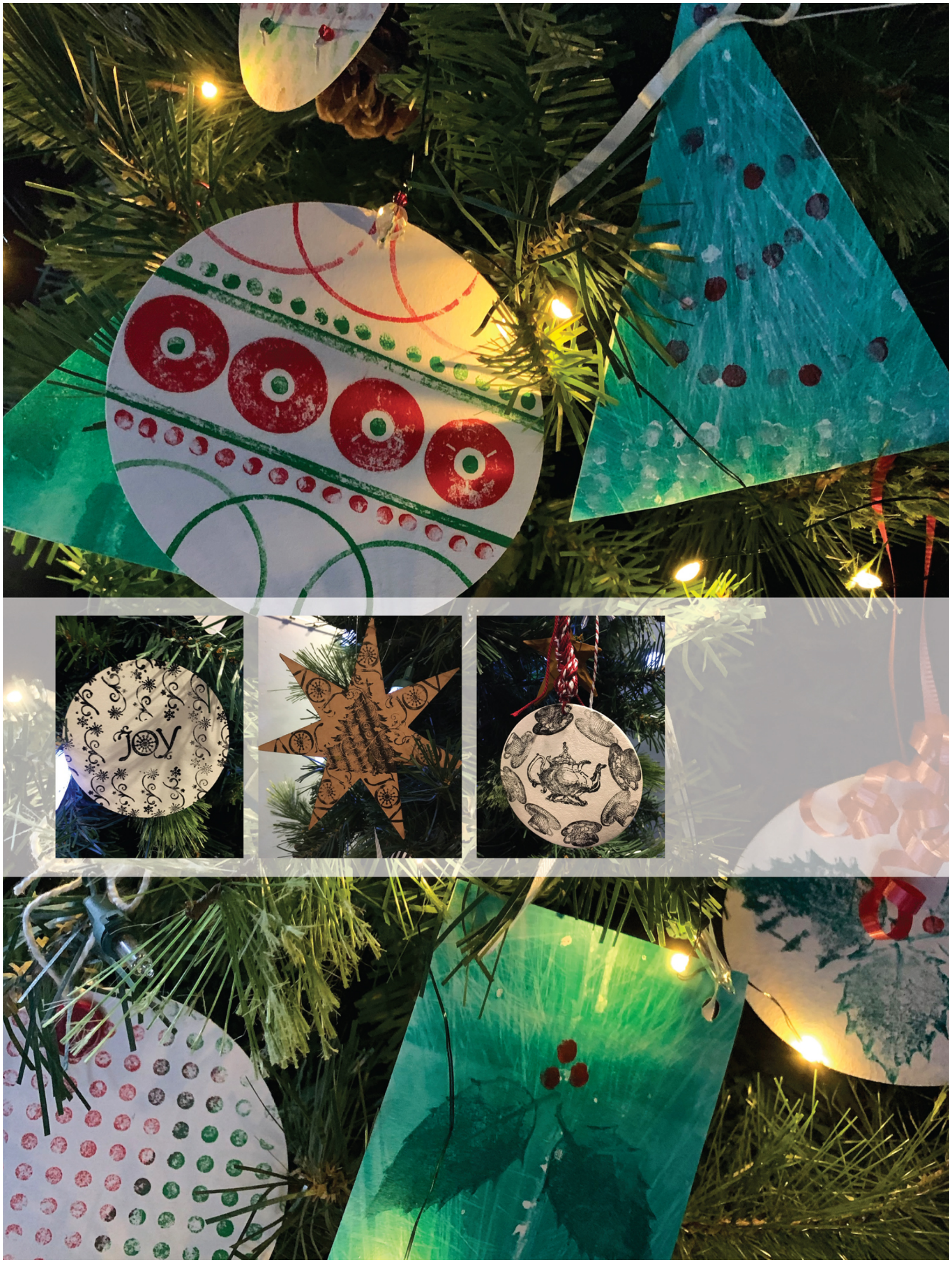


Figure 3.26

The "Print-mas" tree displaying the final printed ornament designs.

The designs on the left were created with store-bought rubber stamps.

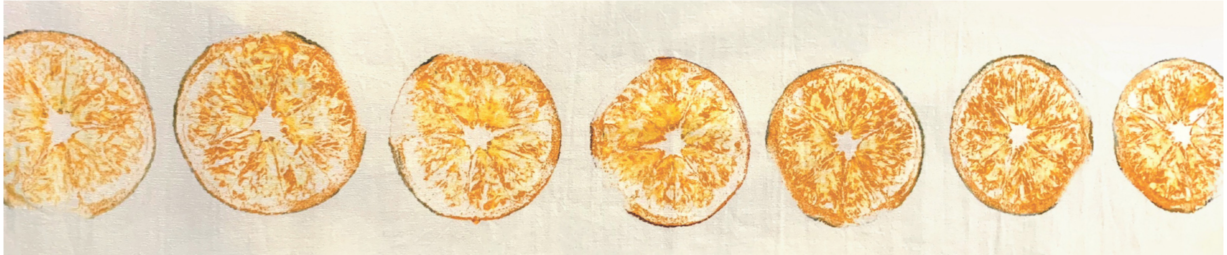


Figure 3.27
An orange with a mixture of yellow and orange inks was printed on a smooth flour sack towel. To get the fine outline, a brayer with black or dark-blue ink was lightly rolled over just the edges.

PROJECT 2

Print Flour Sack Towels with Produce

Flour sack towels, also called "tea towels," are great big blank canvases that are fun to decorate and easy to make. The ink will not wash out, so do not be afraid to use them. They are easy and quick to make. Try this on your own or as a group activity for all ages.

This project is designed to be flexible, so feel free to use your own approach and incorporate what you learned in the previous project by combining tools and techniques. You may be new to printing and want to replicate these project designs before you venture off on your own. Exploratory printing in a sketchbook or on scrap paper is a great way to get warmed up and understand how different types of produce prints.

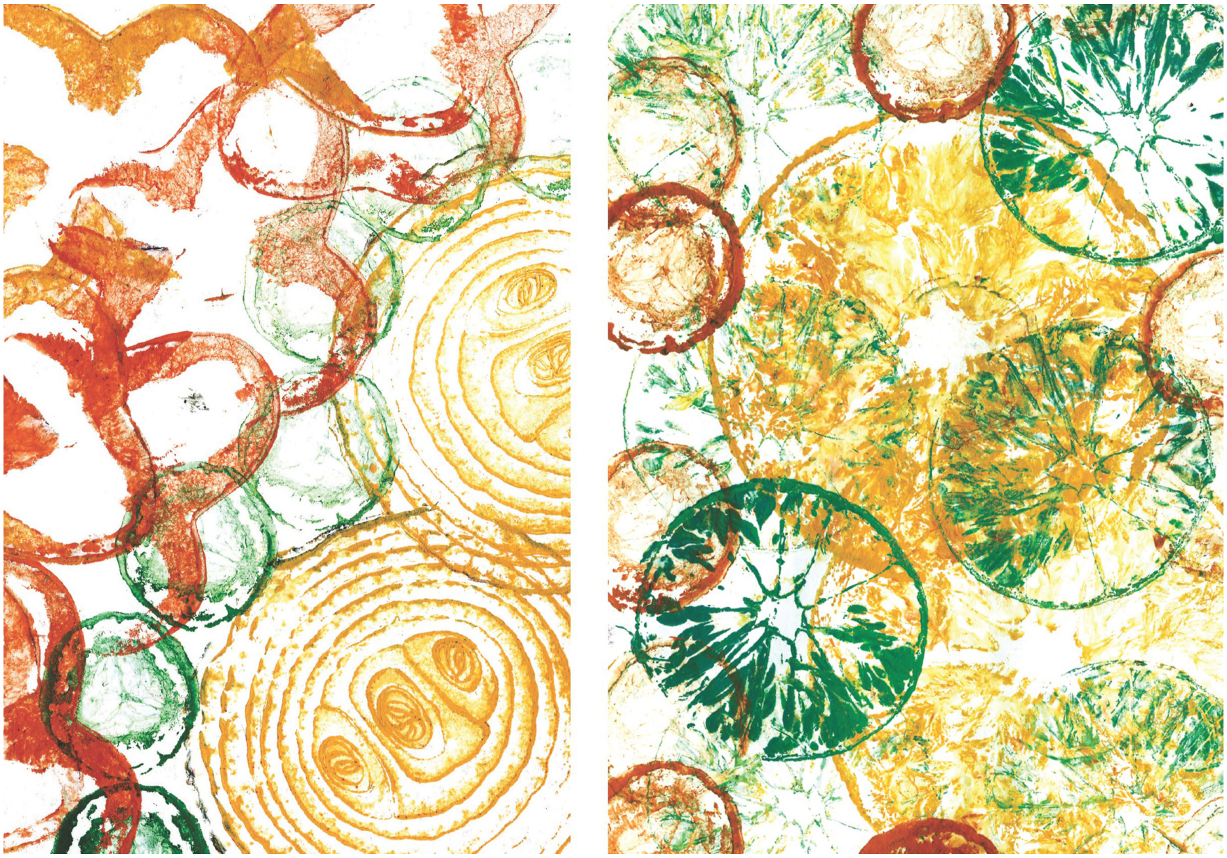
Printing with different fruits and vegetables gives exciting and surprising results. Beautiful natural textures and patterns are created from oranges, lemons, star fruit, apples, onions, and peppers. You could try corn on the cob, cabbage, or okra. Add stamped letters or found objects, or use store-bought rubber stamps to enhance the designs. The options are endless!

Ink Tips

Both Speedball Fabric Ink and Charbonnel Aqua Wash will work well for this project, though Charbonnel takes longer to dry. It washes up with water when wet, but it is permanent and water-resistant once dry.

Supplies

- ☐ Blank 100 percent cotton towels
- ☐ Aqua Wash or Speedball fabric ink
- ☐ Brayer
- ☐ Fresh produce
- ☐ Knife and cutting board
- ☐ Large work surface
- ☐ Paper for test prints



Figures 3.28 & 3.29 *Practice on paper first, as shown above. You can explore images, inks, and techniques without the worry of ruining a towel.*

Setup

Step 1 Wash the towels and then iron them to remove large creases that may interfere with printing. There are two types of fabric for the towel: one is more lightweight with a gauze feel, and the other is smooth and heavier weight. (Figure 3.30) The colors on the smoother towel on the right, with the sewn hem, print brighter, and the fabric irons flatter. The one on the left is the gauzelike towel, and the prints are softer. The wrinkles will not iron out because of the nature of the fabric.

Step 2 Slice produce with a sharp knife to avoid jagged edges. Let sit for an hour to slightly dry out. The produce will keep in the refrigerator a week or so for printing.

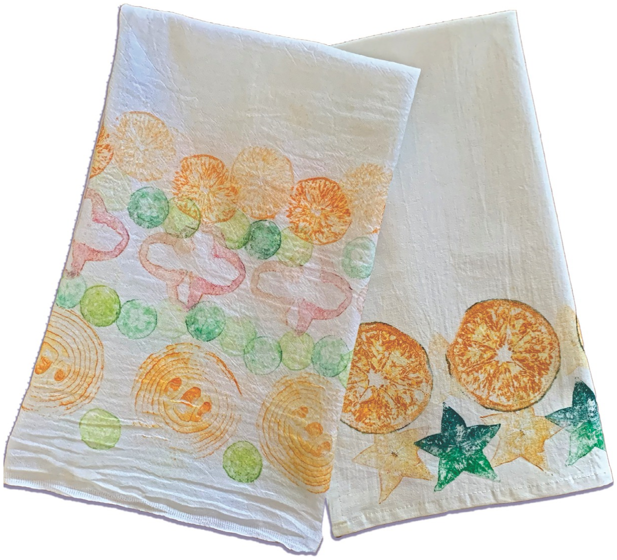
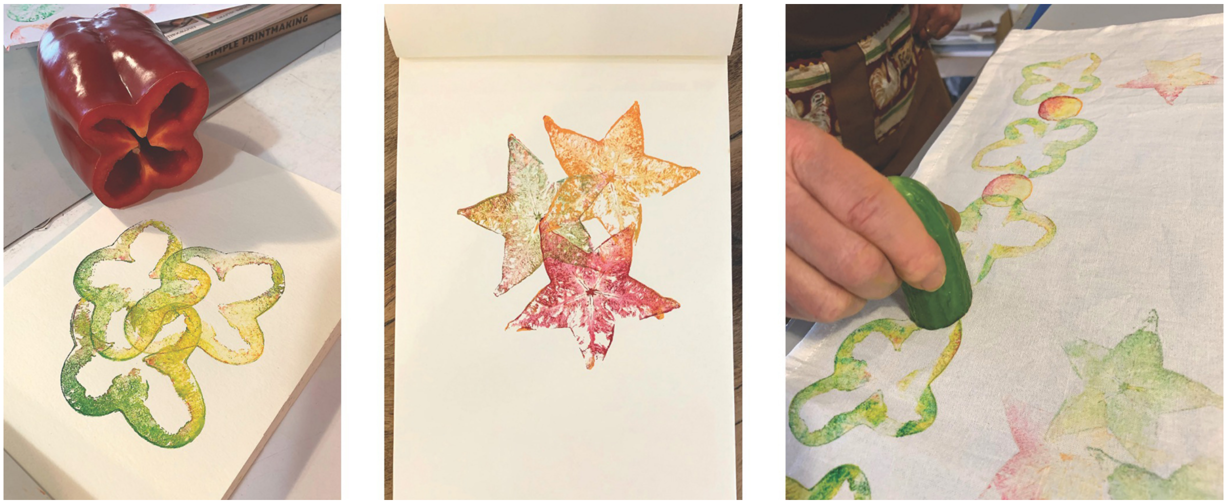


Figure 3.30 *Two types of flour sack material: lightweight gauzelike fabric on the left; heavier weight and smoother surface on the right.*



Figures 3.31–3.33 *More examples of testing prints on paper. The prints will be crisper, so for an accurate rendering, designate a test towel.*

Printing

Step 3 Prepare your ink. Take out a few colors that will look good together on a print, such as the pepper in Figure 3.31 where green blends into yellow, or a red and yellow that will mix to an orange. You may need to mix fresh ink as you work because they get muddy after multiple stamps and color blending.

Step 4 Plan your design. Choose from the following:

- a border on all four sides,
- a border for the top and bottom,
- four corners with a center image,
- an overall grid pattern, or
- a random design.

Play with different layouts to find what you like best. Think about what parts will be showing when it is folded or hanging in your kitchen. (Figure 3.34)

Step 5 Lay out a towel and begin printing. You might want to mark with tape where to print if you have a design in mind, such as the apples in the center of the towel. Eyeballing is fine, and if something is off, it is not going to matter much because the towel will be hanging on a handle or hook, not laying flat. So don’t sweat the mistakes.

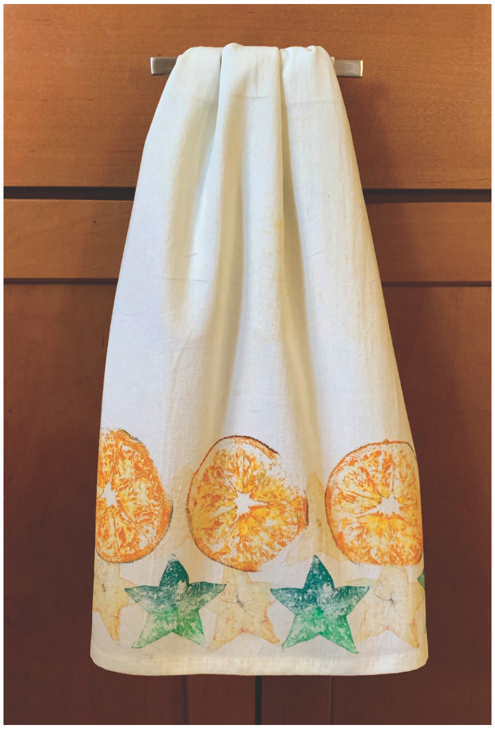


Figure 3.34 *When planning a design, realize that only a portion of the towel will show when in use.*

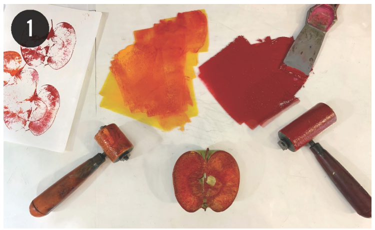


Figure 3.35 *(1) To print the apple towel, test prints were made first to check the impression.*

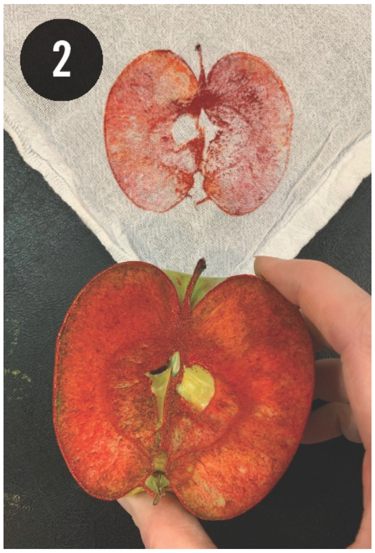


Figure 3.36 *(2) A blend of yellow, red, and orange was applied to the apple for stamping.*

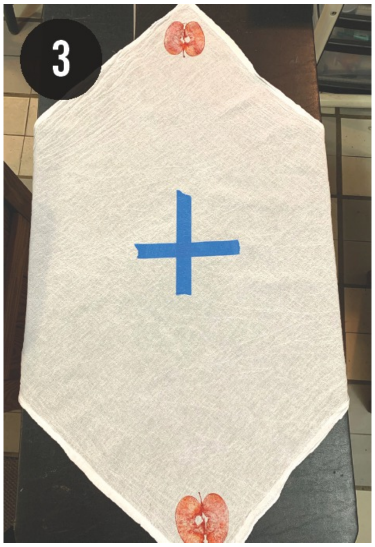


Figure 3.37 *(3) To help align the apples in the center, mark with tape where to print.*

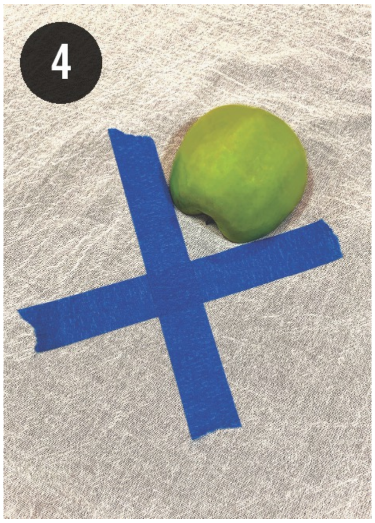


Figure 3.38 *(4) The apple was stamped around the tape.*

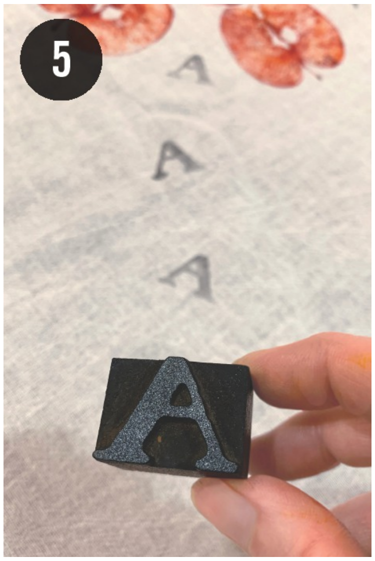


Figure 3.39 *(5) Finally, the letter A (for apple) was stamped in a radiating pattern joining the center to the corners.*

Roll ink on to the produce with a brayer and also try pressing the produce into the ink. You might need to do a combination of techniques to get the result you want. At first, the ink will soak into the produce, but as it dries out and the ink builds up, it will sit on the surface and print better.

You may have to roll the produce slightly when stamping to print the edges. If an edge does not print, line the produce back up with the print and press just the edge down to correct it.

Try mixing different colors on to the printing surface. A history of blended colors can create a beautiful result.

Avoid applying too much ink because it will squish and give you blurry, soft prints. First, practice on paper to get the hang of it. You may even want to have a test towel, where you try out all the produce and colors. (Figures 3.31–3.33)

Step 6 When finished stamping, let the ink cure for a few days. If it is humid, it might take a week to completely dry. After it has dried, heat-set the ink with an iron. Put a piece of paper between the iron and the towel to protect the image and iron normally.

The longer you let the ink cure before washing, the more durable it will be.

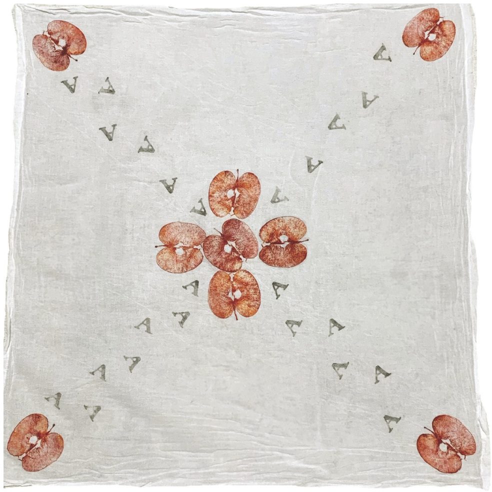
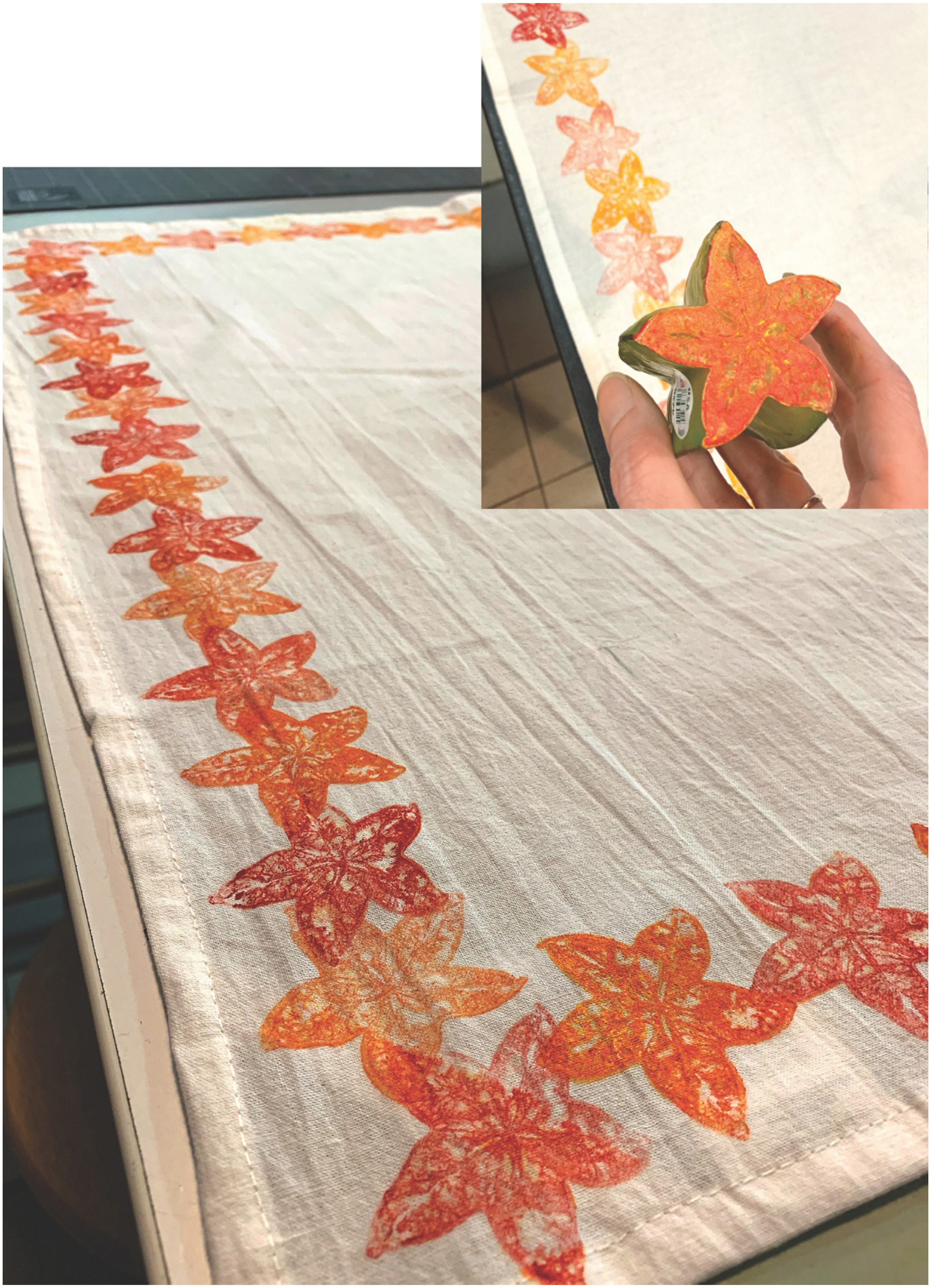


Figure 3.40 *The finished towel*



Figures 3.41 & 3.42 *Here is an example of a four-sided border using a star fruit with alternating colors of red and orange with various tints. The star fruit was not inked up each time in order to get the lighter prints.*

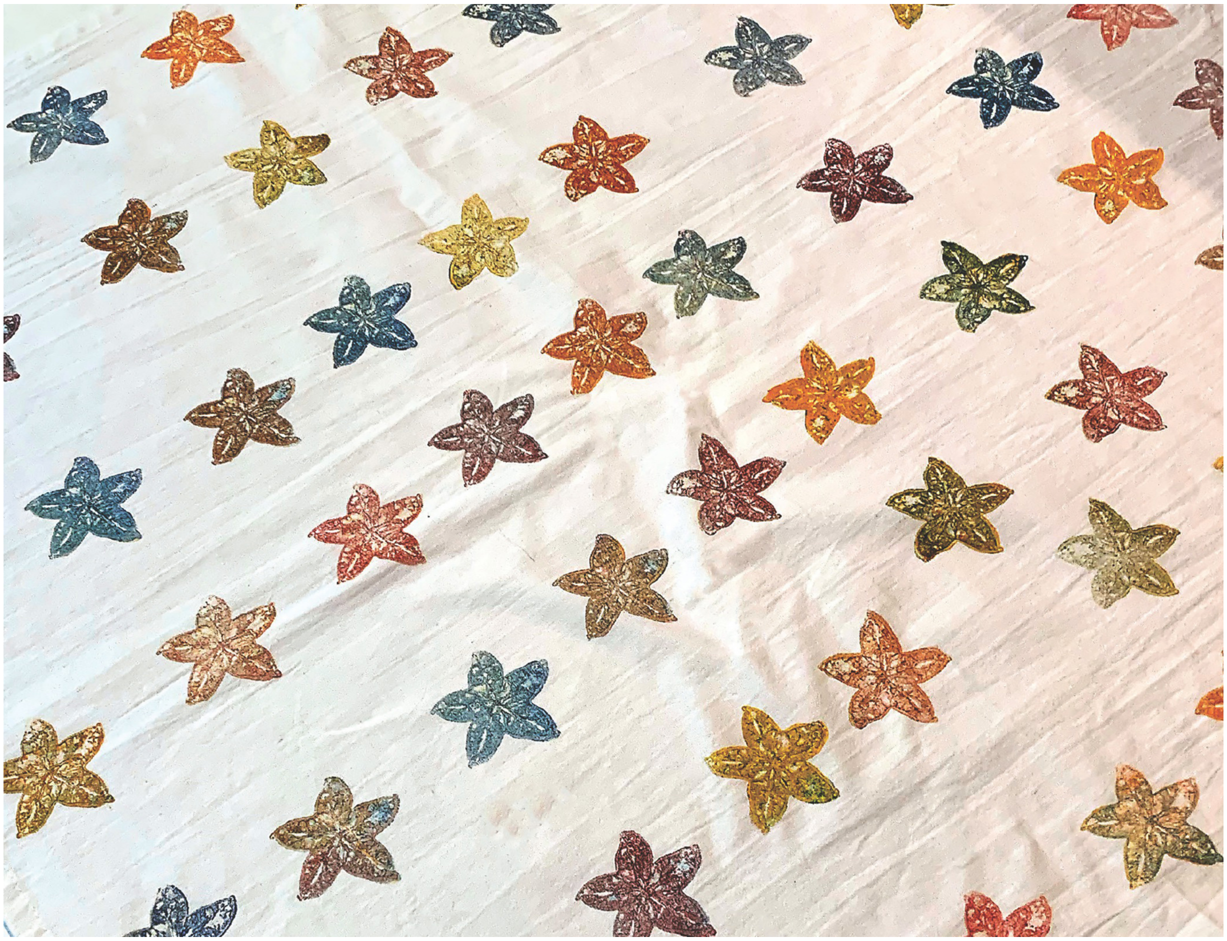
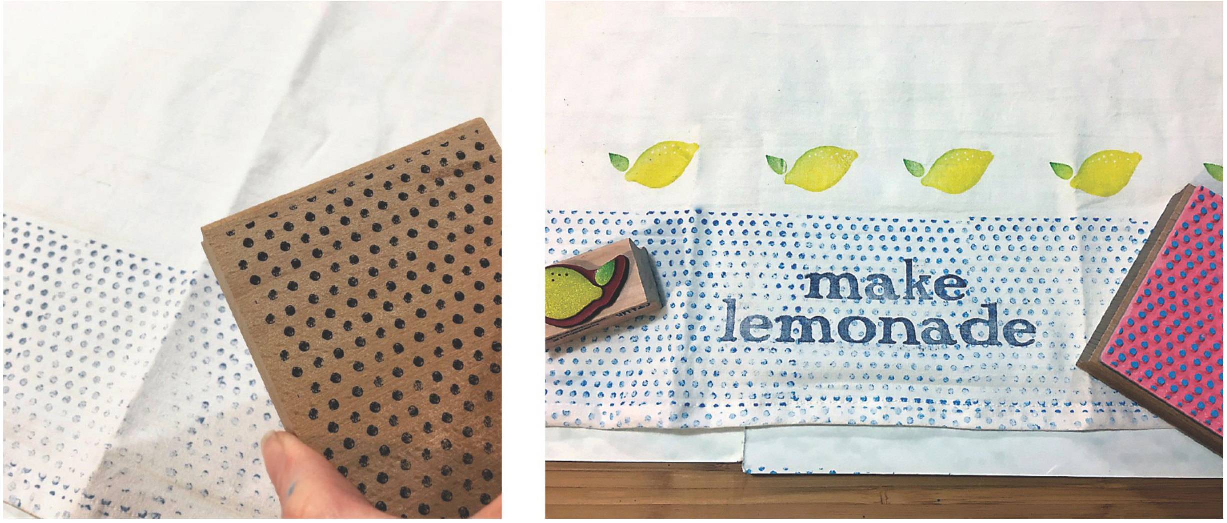


Figure 3.43 *Here is an example of an allover pattern using the star fruit and a variety of colors. When using dark and light hues, your prints can start getting muddy, so rinse off your fruit with a little water or slice off the end to get a clean start.*



Figures 3.44 & 3.45 *Store-bought rubber stamps can create fun patterned designs too.*

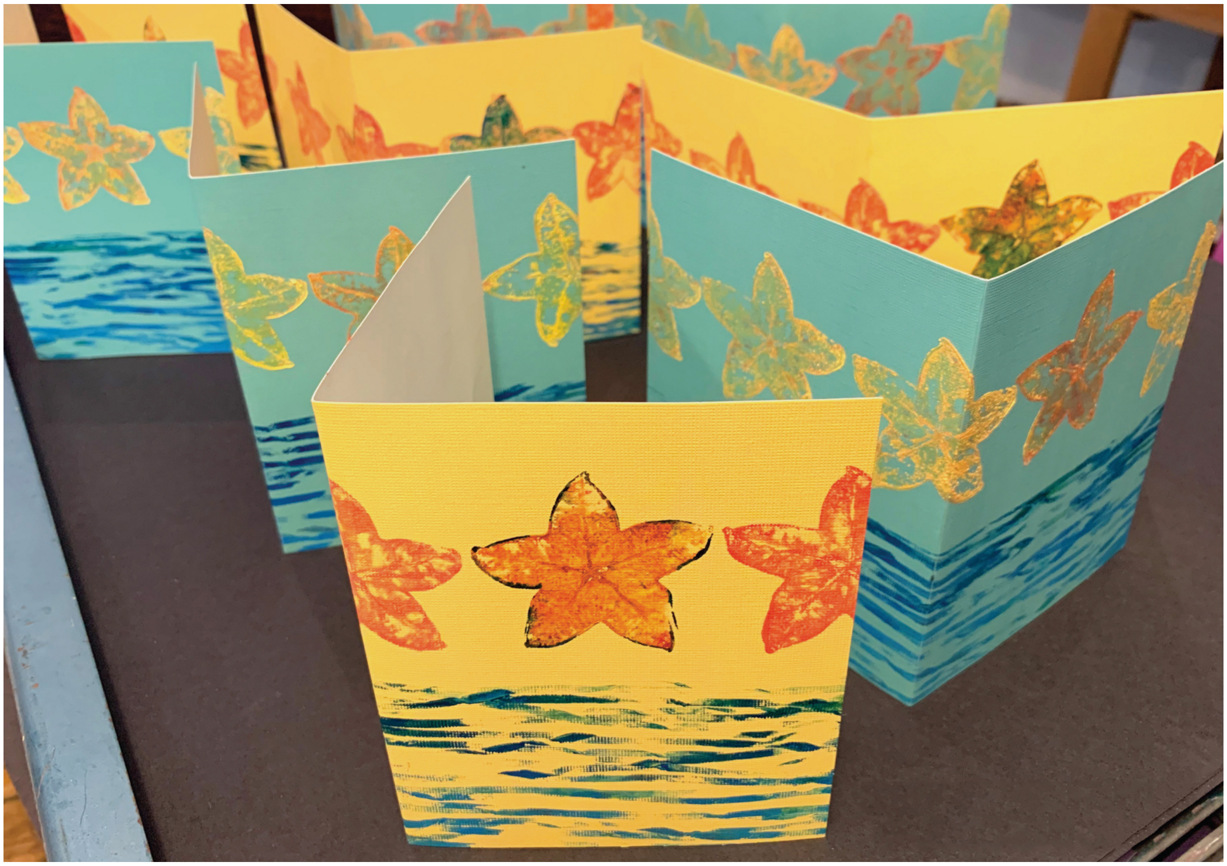


Figure 3.46 ***Note cards printed with star fruit and rubber bands***

PROJECT 3

Create a Set of Note Cards and a Belly Band

For this project, you will print a set of five note cards wrapped in a belly band with a tropical theme. A belly band is a strip of paper that wraps around the cards to keep them together and serves as a pretty way to package the set.

Using a star fruit and a cardboard tube wrapped with rubber bands for a wavy water pattern, you will print with tropical-inspired colors like blue, red, orange, yellow, and white to create your own custom cards to use or give as gifts.

Supplies

- ☐ Blank note cards and envelopes, or you can make your own cards with card stock
- ☐ Legal- or tabloid-size paper for the belly band (copier paper is fine)
- ☐ Star fruit
- ☐ Cardboard tube roll with rubber bands
- ☐ Ink: blue, red, yellow, orange, white
- ☐ Brayers and ink knives

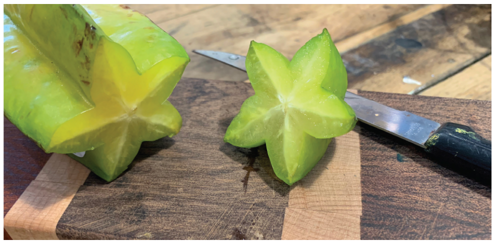


Figure 3.47 *Slice your fruit at a perpendicular angle with a sharp knife to get a clean printing surface and edge. Leave enough of the fruit to hold on to for stamping.*

This tropical design is a suggestion. You can pick your own approach by changing ink colors, paper color, and printing objects depending on what you have around the house. For instance, instead of printing with rubber bands, glue string to a tube for a wavy water pattern or wrap masking tape around the tube and print it. And, remember, if you want lettering, use rubber stamps.

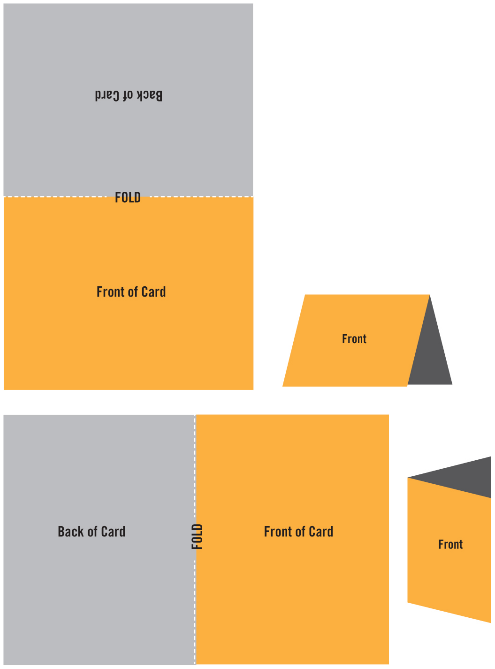


Figure 3.48
The top layout shows the card fold at the top for a horizontal card. The bottom layout is a vertical card when folded. Make sure you print on the correct panel for the card front.

To make your own card, you can cut two 4.25 " x 5.5 " cards out of a single sheet of letter-size paper. Fold in half after printing, when the ink is dry.

If you have trouble finding star fruit, think about what else you could use to make a star. Or select another shape, such as the sun. There are plenty of circular items around the house. A potato can be cut into any shape and stamped. (Figures 3.49 & 3.50)

Figures 3.49 & 3.50 *Using a potato is a quick way to make a stamp. Slice it in half and cut out a shape with a knife or cookie cutter. Let it dry out for a couple of hours, then ink and stamp.*

Setup

Step 1 Cleanly slice your star fruit at a perpendicular angle and set aside to let the surface dry for at least an hour. The drier the surface, the crisper the image.

Step 2 Select or make your own note cards. Consider size, color, and orientation. If you buy blank cards, some are flat and others are folded. It is better to print when they are flat, so unfold any folded cards when printing. See Figure 3.48 for layout templates.

Printing

Step 3 Because this project is printed on yellow and blue paper, the ink for the star fruit will appear slightly different. The dark-blue for the water will show up fine on both colors.

Let us first print the water. We will use a rainbow roll of two blues and white in the middle. Squeeze out a small amount of blue, white, and then blue again. Use the same blue, or try a lighter and a darker hue together.

- Take the ink knife and evenly spread out the colors to the width of the roller. Use a larger roller, like the six-inch roller shown in Figure 3.51, to get a good blend. A four-inch roller would work too.
- Roll in the same direction, forward and back with very slight movements side to side, until you get the inks blended. (Figure 3.51)
- Now, take a small tube covered with rubber bands, slip a handle through it to keep your hands clean while you apply the ink with pressure. An extension handle from a paint roller or a heavy dowel will do. (Figure 3.52)
- Roll over the ink blend in the same back-and-forth direction to ink the tube. Pick up the tube and roll it slightly to get overall even ink coverage.
- Next, roll the tube over the bottom part of a card to print the water. Use a cover sheet to protect the area you do not want to print on. That part will be used later for the star fruit. Do a test print first to get the feel of printing with the tube. (Figure 3.53)

  In this case, because the tube is long enough, two cards can be printed at once, which is more efficient when printing multiples. Flatten out two cards and line up the long bottom edges. Put cover sheets on each card, leaving a few inches exposed (however high you want the water to be). (Figure 3.54)

  Then place your tube at the bottom, below the paper edge. Firmly and slowly, roll the tube up. Go past the edge of the paper so the print fully covers it. (Figures 3.54 & 3.55)

  Now, flip the tube over and repeat the process. You will get a different pattern, and distinct ink blends, and it fills in the water. (Figures 3.56 & 3.57)
- Set out to dry. Because the next color does not overlap or touch the blue, you can print the star fruit while the ink is wet. If you do not want to risk smearing it, it is best to let it dry for an hour or longer before printing again.

Step 4 Now print the star fruit.

- Mix up a bright, warm color for your star. If printing on white paper, the ink color will print as mixed. If printing on color paper, the ink color will shift. For our cards, yellow ink on blue paper shows up fine, but it is barely visible on yellow paper. So adding a little red to the yellow to make more of a golden yellow works better for yellow paper.

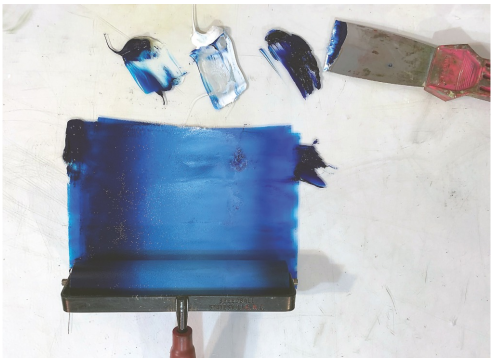


Figure 3.51 *Blending colors together for a rainbow roll*

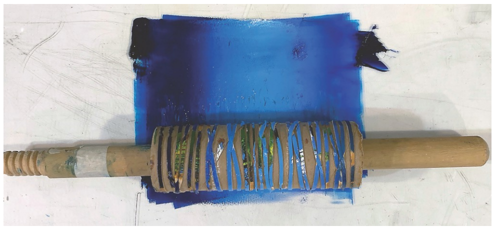


Figure 3.52 *Inking up the printing tube with a makeshift handle to keep your hands clean and to create pressure*

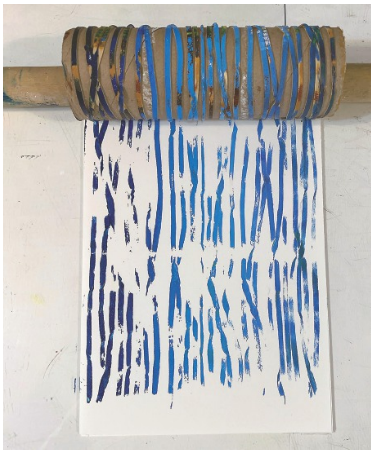


Figure 3.53 *A test print is always a good idea to check ink and image quality.*

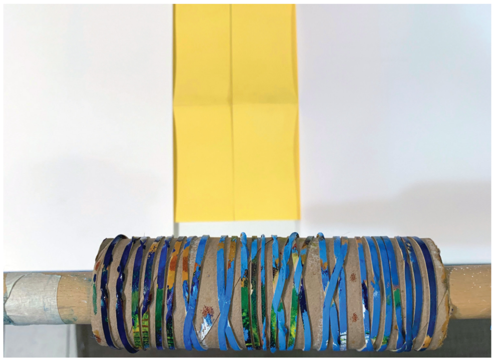


Figure 3.54 *Laying out two flat cards with cover sheets to protect the nonprinted areas. Note the position of the tube is lower than the card, to make sure the card edge gets printed.*

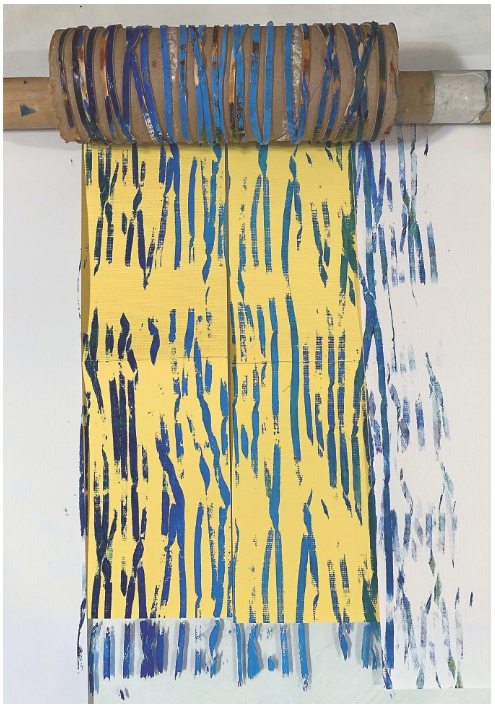


Figure 3.55 *Roll the tube up past the card edge.*

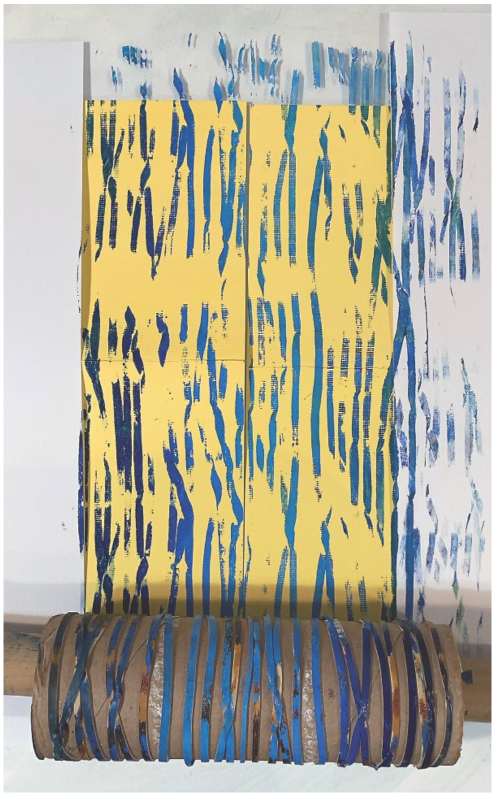


Figure 3.56 *Flip the tube and roll again.*

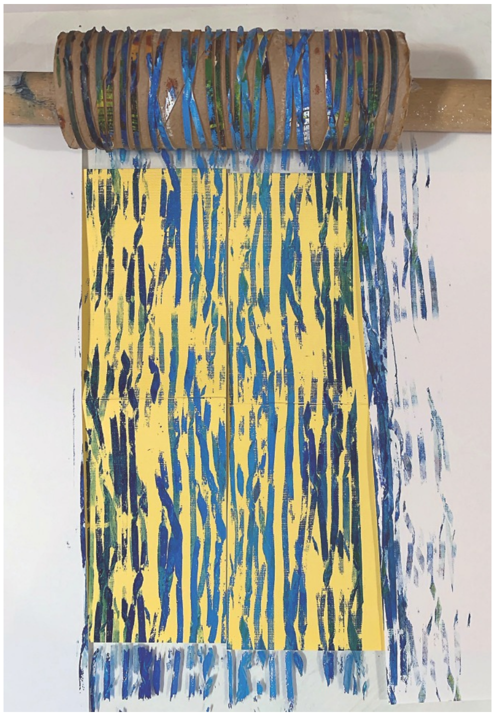


Figure 3.57 *The final print with two passes*

- By mixing together cardinal-red, deep-yellow, bright-yellow, and some white, an interesting blend is achieved that will show up on both blue and yellow papers (Figure 3.59). Occasionally, the star was stamped in the leftover blue ink to add contrast and fine outlines.
- Roll the ink on the star fruit. If it is not taking the ink very well, then press it on to the inking surface. You may have to do a combination of both to get it started. Do some test prints first. Try two colors together. Take the blue color and roll just the edges of the fruit to make an outline.
- Print on test paper to check the color and image quality. Rock the fruit slightly, side to side and top to bottom, to make sure the edges touch the paper. You may need more ink or to change the color to your liking. The first impression will be the darkest, but there still is enough ink to get lighter prints.
- Press the fruit on the card front in the location you desire. The example shows overlapping impressions, but you can try one single impression in the middle. Reink as needed.

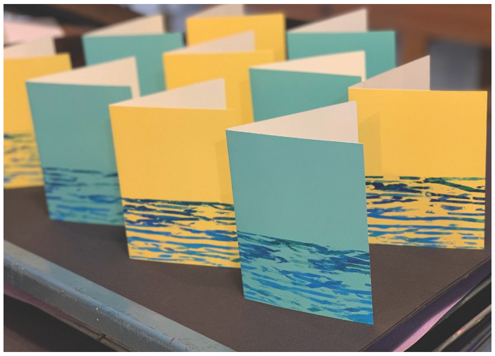


Figure 3.58 *Result of printing blue on cards*

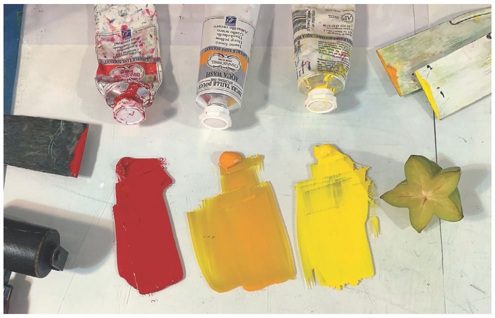


Figure 3.59 *Color choices for star fruit print*

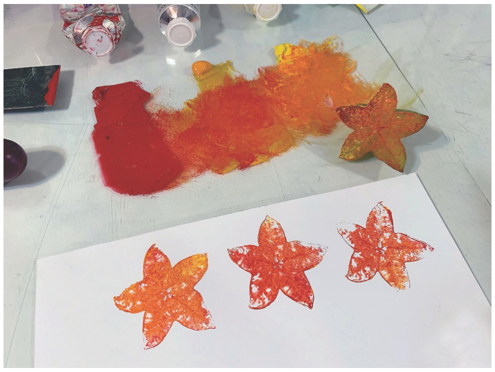


Figure 3.60 *Colors blended with test prints*

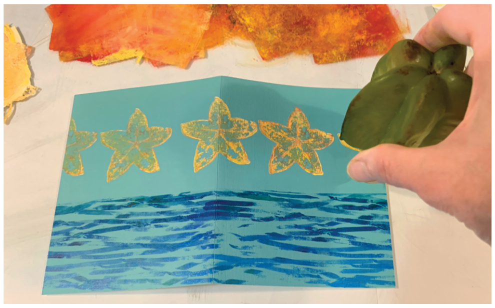


Figure 3.61 *Using a lighter yellow and orange to print on a blue card*

Step 5 Before you put away the star fruit, print a series on a large piece of paper to use as the belly band. We will cut and fold a strip of that paper, which will wrap around the set of cards and envelopes, detailed in the instructions below. (Figures 3.63–3.70)

When finished with the star fruit, wrap it up and store in the refrigerator. To reuse, slice off the end to expose a clean surface.

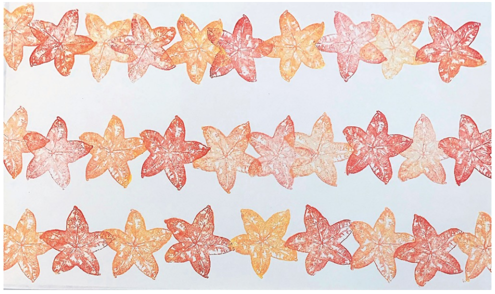


Figure 3.62 *Printed rows of star fruit, using different colors and spacing, on legal-size paper for belly bands. Each row will be cut into a strip for a band. The band needs to be long enough to wrap around the cards and envelopes and be secured in the back with tape or glue.*

The belly band print must be completely dry before cutting and folding.

Making a Belly Band

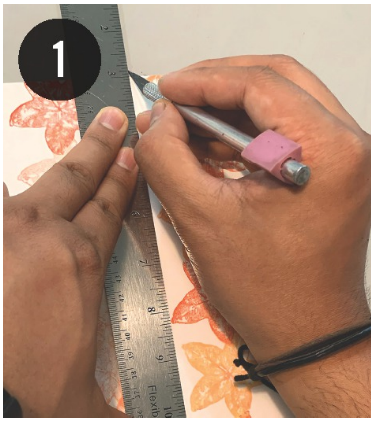


Figure 3.63 *(1) Use a straight edge and a knife to cut the strips. Always keep fingers behind the ruler edge. A rotary trimmer or paper cutter are other options for cutting strips.*

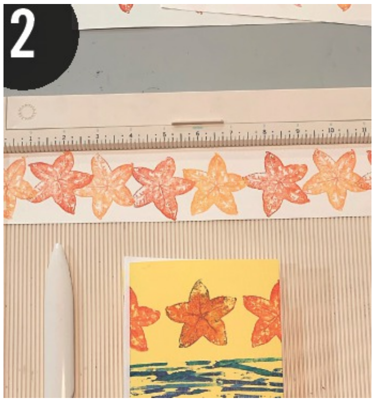


Figure 3.64 *(2) This Martha Stewart scoring board and bone folder are perfect tools for making crisp, flat folds.*

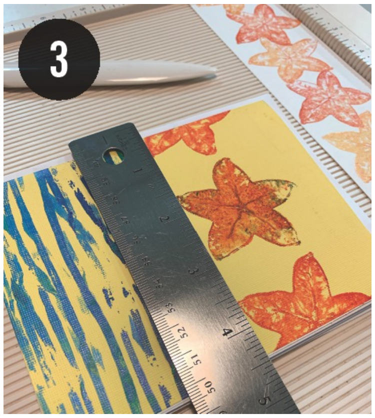


Figure 3.65 *(3) Measure the width of your cards stacked with the envelopes for your first score and your first fold. The cards are four-and-a-quarter inches wide, but with the envelopes the stack is four-and-a-half inches.*

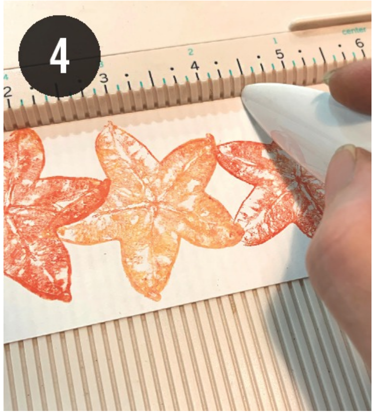


Figure 3.66 *(4) Find the middle of the band, and measure out where you want your left and right folds, leaving four-and-a-half inches between them.*

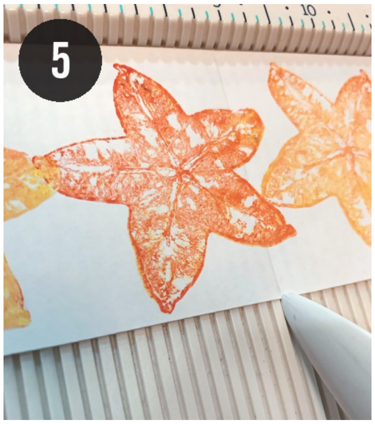


Figure 3.67 *(5) Drag the bone folder down the groove of one fold with even pressure. This is a "score." Do not press too hard, or the paper will rip. Practice first!*

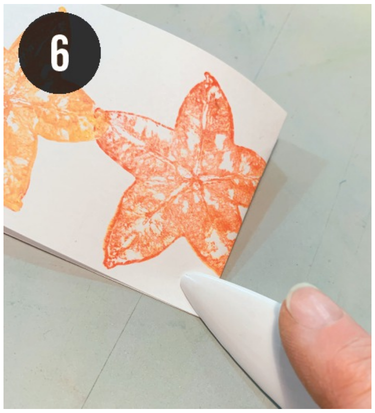


Figure 3.68 *(6) Gently make a fold on the score and then run the bone folder along the folded edge. This creates a flat, clean fold.*

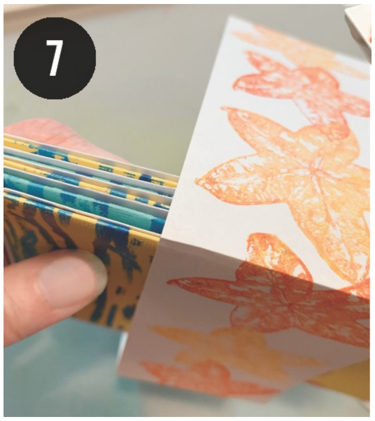


Figure 3.69 *(7) Line up the fold to see how thick the side needs to be to wrap around the stack of cards and envelopes. Then create another score and another fold. Do this for each side.*

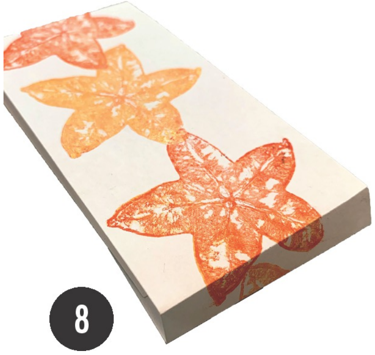


Figure 3.70 *(8) The final belly band looks like a shallow box. Wrap around the stack and tape, glue, or use a sticker to secure. If the paper is too long, trim it to fit.*

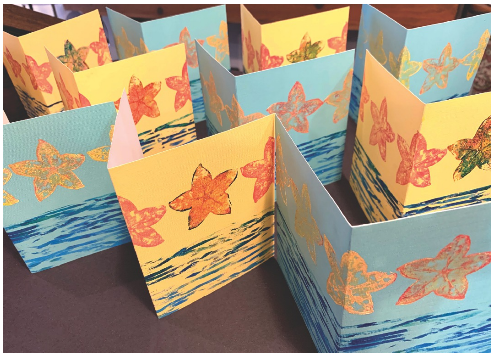
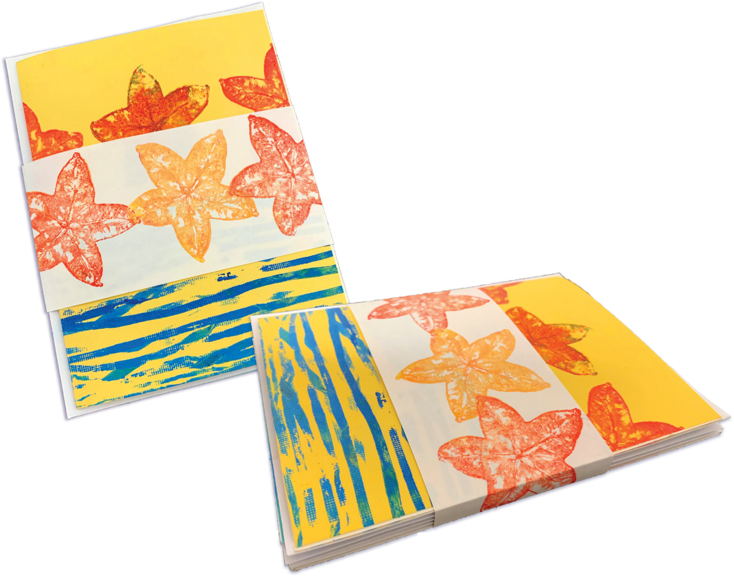


Figure 3.71 *The final printed cards. Make sure they are completely dry before stacking.*



Figures 3.72 & 3.73

The final note card set with a belly band

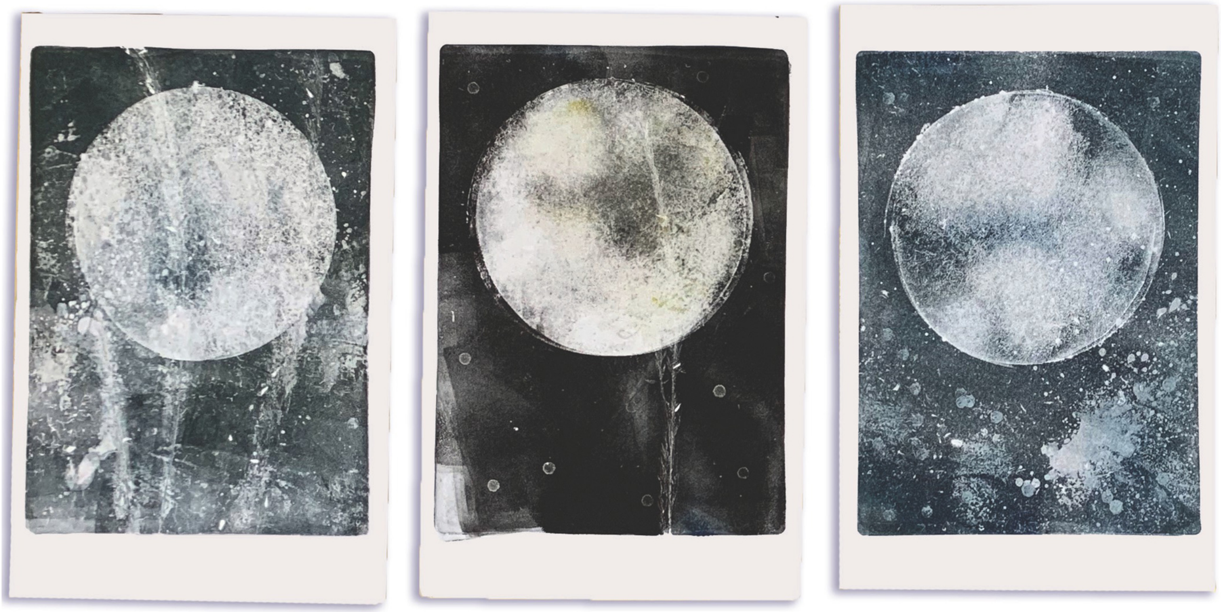


Figure 3.74

This series of gel plates began with one idea, and it evolved by experimenting with different materials such as a paper coaster, tall grass, leaves, oil, a stencil, and overprinting. The process is detailed on the next page.

PROJECT 4

Monoprinting with Gel Plates

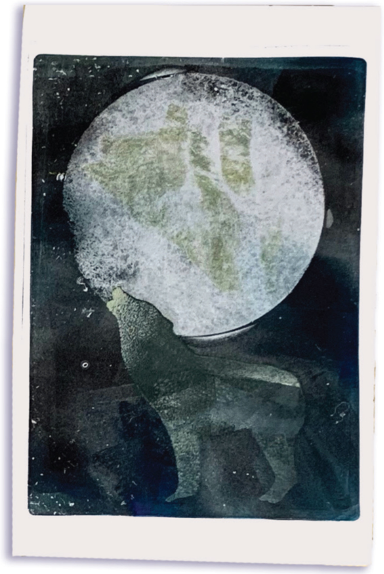
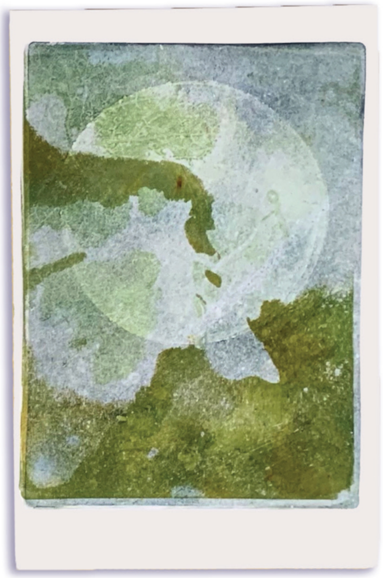
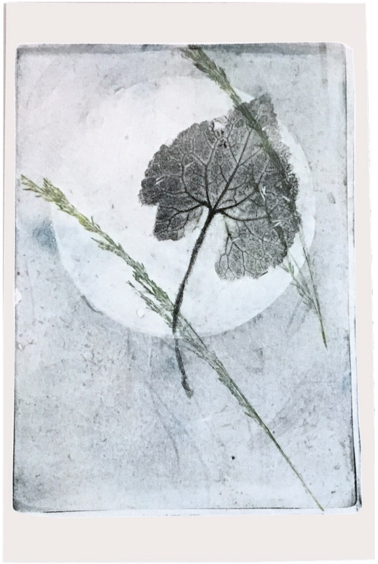
Supplies

- ☐ Gel plate (commercial or homemade)
- ☐ Paper cut to size for plate
- ☐ Textured objects: fabric, leaves, feathers, netting, Bubble Wrap
- ☐ Stencils (plastic or paper, commercial or handmade)
- ☐ Found objects: cookie cutters, corks, spools, string, combs, chopsticks
- ☐ Image transfers: *Vogue* magazine or other high fashion publications with high glossy printing
- ☐ Brushes
- ☐ Brayers
- ☐ Inks
- ☐ Baren
- ☐ Baby oil or vegetable oil

Gel plate printing is fun and easy, and it offers endless possibilities to create one-of-a-kind prints. We will use gel plates to explore various techniques for monoprinting. Monoprinting can result in a series of prints that reveal an evolution of experimentation, with a little history of the previous print showing up in the next. (Figure 3.74) Gel plate prints are great to use as backgrounds to print other imagery or text on top in combination with other relief processes. Warning: gel monoprinting can be addictive!

We will address various approaches to gel plates and you will find that a combination of these techniques creates exciting prints.

- The “subtractive process” is where the plate is inked and objects are pressed into it to remove ink, resulting in a printable image.
- The “additive process” is where the ink is painted on the plate and rolled on through a stencil, or inked found objects, rubber stamps, or other items are pressed on the plate to create an image.

- An “image transfer process” uses pages from a magazine.
- Layering prints on top of each other and using the plate as a stamp is another process.

If you want to learn more techniques, there are many online informative and inspirational tutorials.

Ink and Paint for Gel Plates

My preference is using ink over acrylic paint. Acrylic paint is fine, but you have to work quickly because it can dry on the plate. You can add a modifier to slow down the drying time. Inks like Speedball relief with a modifier will give you more time to create. For these projects, I used Charbonnel Aqua Wash because it stays active on the plate and inking surfaces for a few hours.

Subtractive Process

- Use a brayer to evenly cover the plate with ink of one or more colors.
- Press textured items like fabric, leaves, netting, paper, twine, etc., and pull off. Impressions of the items will remain on the plate.
- Place your paper over the plate and rub firmly and evenly over the back of the paper. Peel off your print and reveal the magical result! It is that easy.

Cleaning Up

Clean the plate with baby wipes to change colors or imagery between prints. To completely wash, use baby oil or vegetable oil. Use mild soap and water to remove oil residue. If you have handmade plates, be sure to use cold water so you do not melt them.

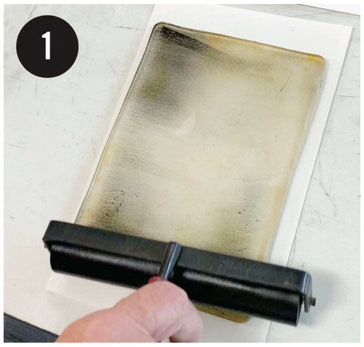
Store plates between acetate sheets to protect the surface from dust. Keep the gel plates flat and realize that they will acquire indentations of anything placed on top or underneath.

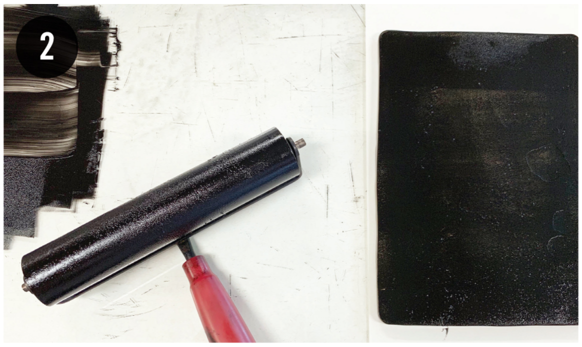
Figure 3.75

If you have leftover ink, scrape up as much as you can and store it between two sheets of

acetate.

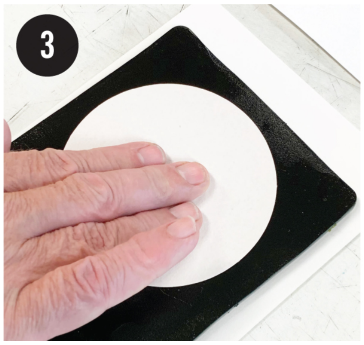
Subtractive Process: Moon

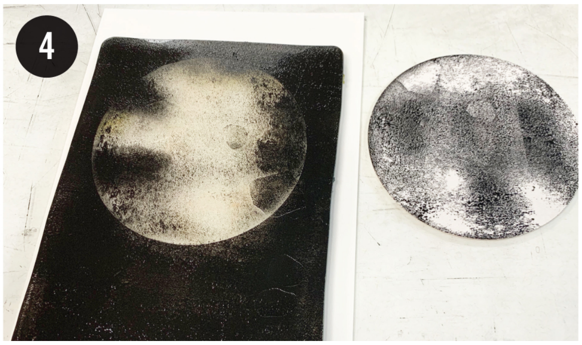




Figures 3.76 *(1)* **& 3.77** *(2) Inking the plate so it is evenly covered*

Remember: the slower you roll, the more ink is transferred to the plate. The faster you roll, the more ink is picked up off the plate.





Figures 3.78 *(3)* **& 3.79** *(4) Pressing a paper coaster into the ink to remove it leaves a textured circle resembling the moon.*

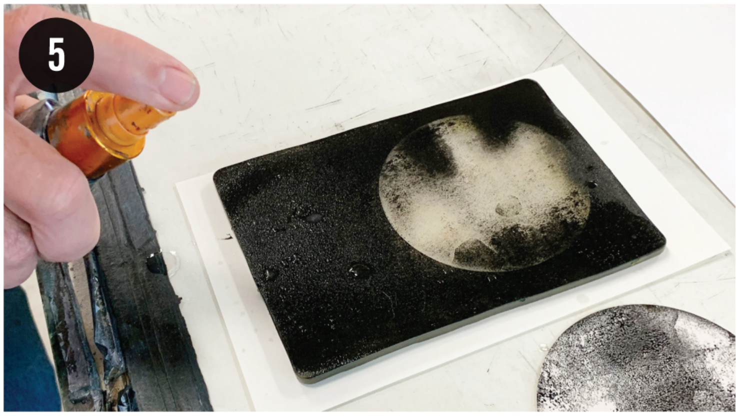
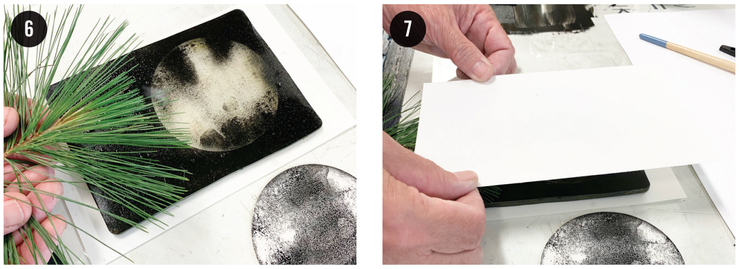


Figure 3.80 *(5) Spritzing the ink with baby oil in a small plastic spray bottle. This will create painterly drops in the background.*



Figures 3.81 *(6)* **& 3.82** *(7) A small pine needle branch is placed on top and then the paper.*

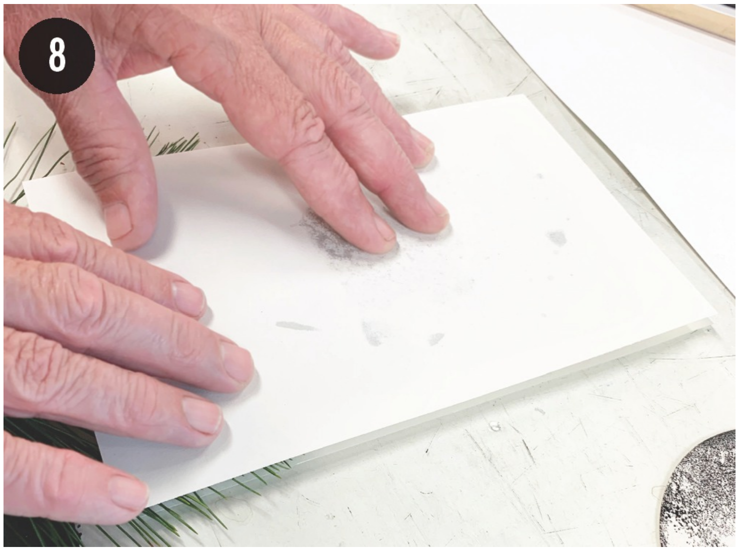


Figure 3.83 *(8) The paper is pressed down firmly and evenly. The pine needles are acting as a stencil and preventing the needles from printing on the paper. But what actually is happening is the pine needles are removing the ink from the plate.*

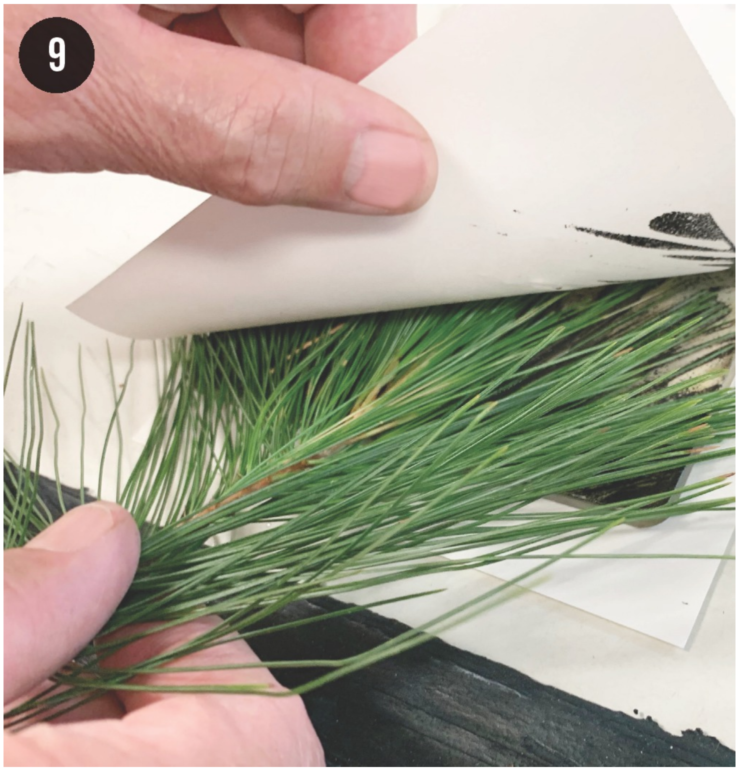


Figure 3.84 *(9) Lift the end of the paper and remove the pine branch, leaving the impression of the needles on the plate. Then press the end of the paper back down again, which will allow the pine needle impression to print.*

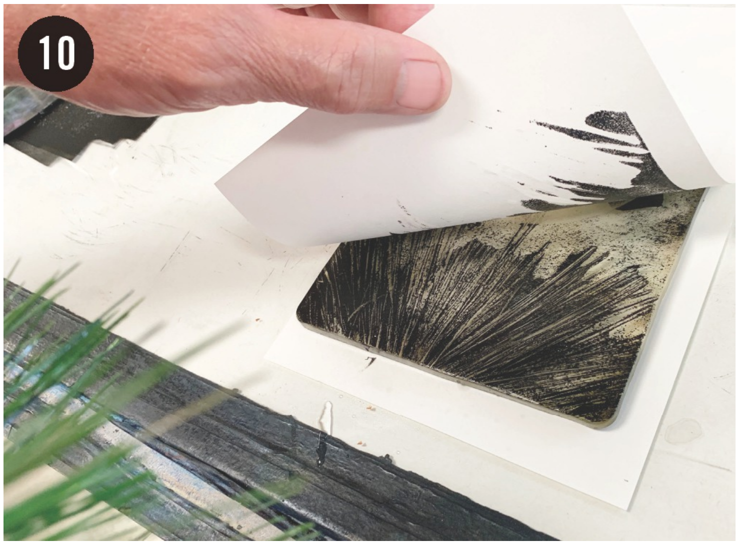


Figure 3.85 *(10) Peel up the paper to reveal the print.*

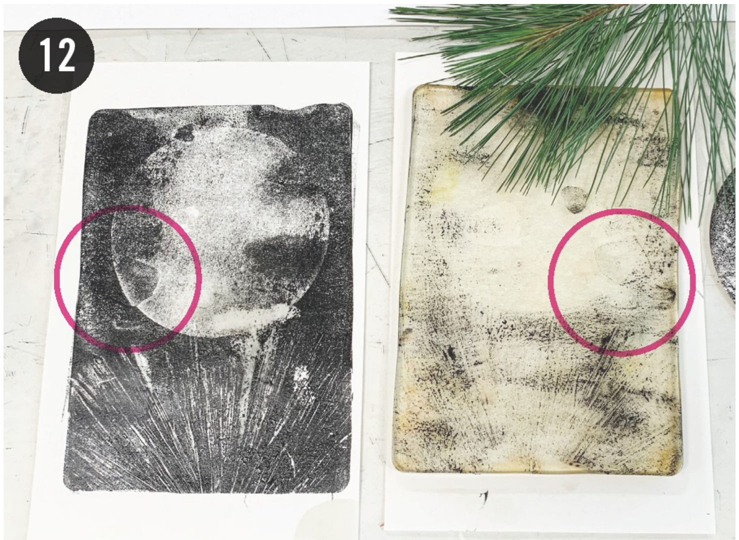


Figure 3.87 *(12) To fix those white areas, simply pick up the plate and align it over the print. Because it is transparent, you can see where to line it up to the white area. Gently touch it to the paper, and the ink will easily transfer and fill those parts.*

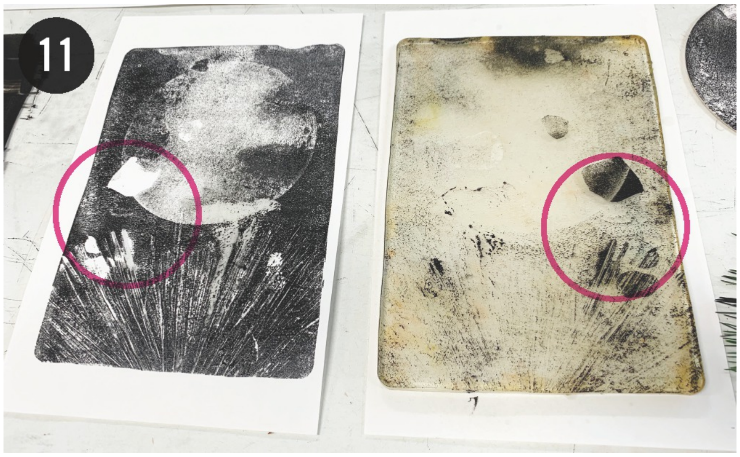


Figure 3.86 *(11) The plate and the print. Note there are a couple of areas that did not take the ink, which still remains on the plate.*

Subtractive Process: Folded Paper Fireworks

To prepare for this technique, spend time folding paper into accordion fan folds as shown in Figure 3.89. Try longer and shorter sheets of paper to get different results. Add a binder clip to hold the fan or bow tie shape and to serve as a handle for stamping. A heavier-weight paper like card stock works well. Make accordion fan folds evenly spaced apart, such as one-half inch. (Figure 3.88) Score and fold back and forth with the bone folder for crisp edges that will make strong marks.

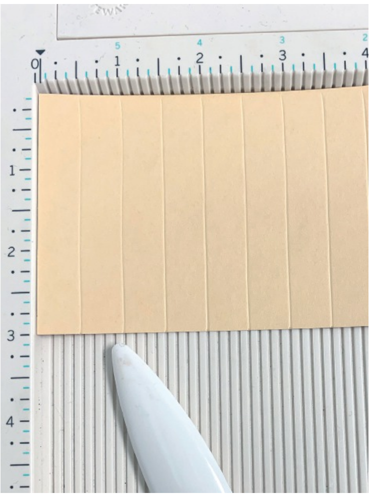


Figure 3.88 *Scoring folds*

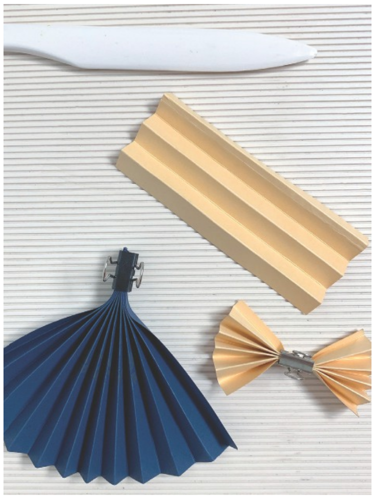


Figure 3.89 *Accordion folds*

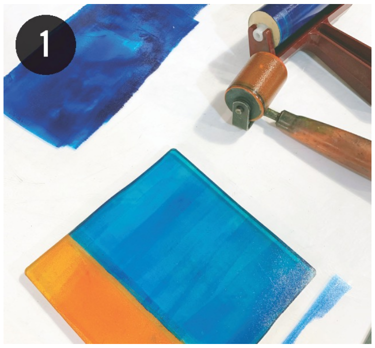


Figure 3.90 *(1) Two colors on a plate*

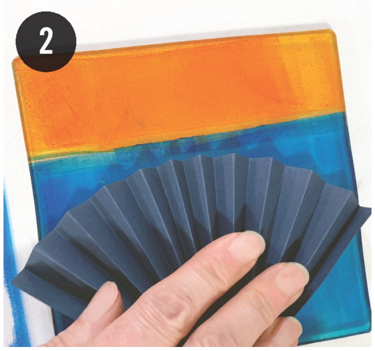


Figure 3.91 *(2) Fan pressed into ink*

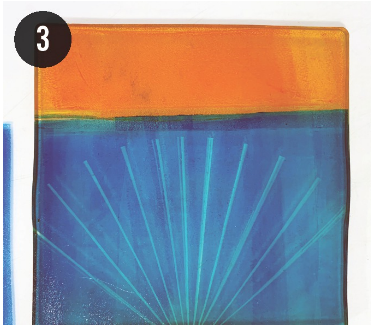


Figure 3.92 *(3) Impression left by fan*

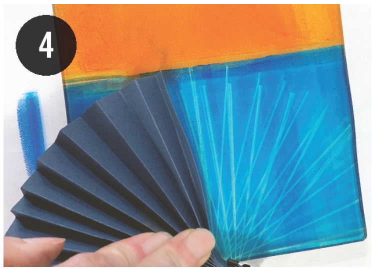


Figure 3.93 *(4) Fan pressed again to add overlapping lines*

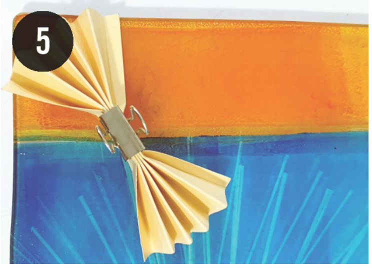


Figure 3.94 *(5) Bow tie paper pressed on the orange area*

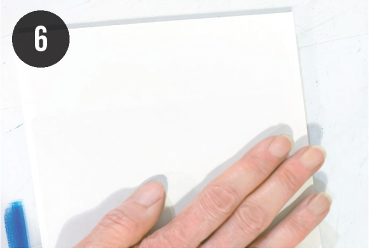


Figure 3.95 *(6) Even pressure applied to back of paper to make print*

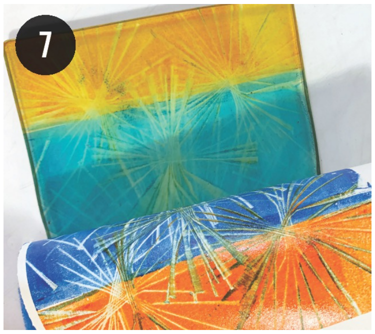


Figure 3.96 *(7) Print pulled from plate. Enough ink is left to make a ghost print.*

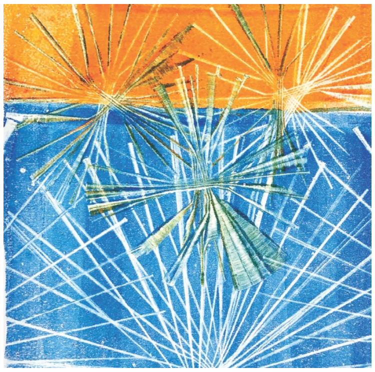


Figure 3.97 *First print*

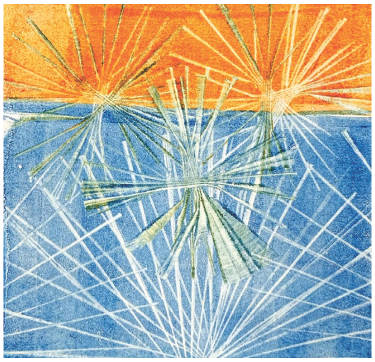


Figure 3.98 *Ghost (second print)*

Stencils

Stencils can be used in a subtractive or an additive process. Any object that prevents ink from transferring to the plate or paper is considered a stencil. The hand-cut paper snowflake is a stencil used to pull ink from the plate. (Figures 3.99 & 3.100)

String is used as a stencil in Figure 3.102. It blocks the ink from transferring to the paper.

On the following page, the fox print uses a store-bought plastic stencil to control how the ink is added to the plate. (Figure 3.106)

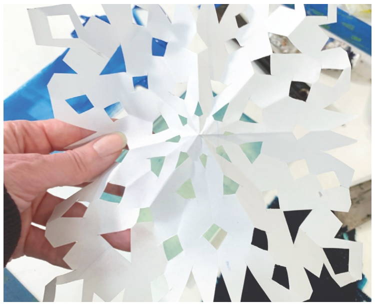


Figure 3.99 *Hand-cut paper stencil*

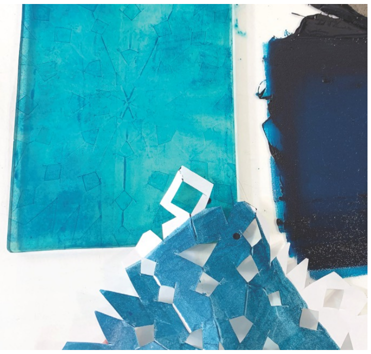


Figure 3.100 *Stencil is pressed on to plate to remove ink.*

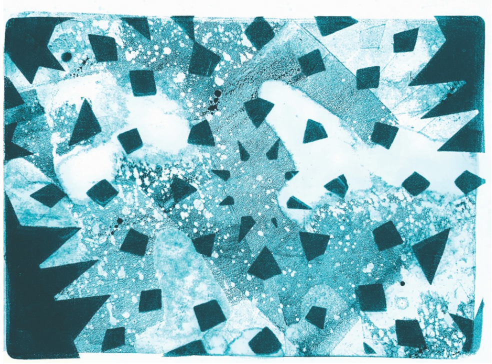


Figure 3.101
This final print is the result of two overlapping prints. The stencil snowflake was printed first. Then the snowflake ghost state was spritzed with a small amount of baby oil and printed on top of the first print.

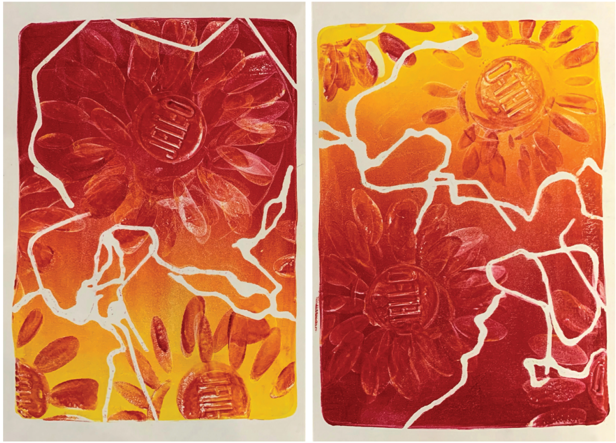


Figure 3.102
These prints are examples of subtractive and stencil printing. The plate was inked with a solid blend of yellow to red, creating the orange color in between. A vintage Jell-O mold was rolled over it to create the flower look. Then string was arranged on top of the plate to act as a stencil, which blocked the ink from printing on the paper. (Art by Meghan Welcyng)

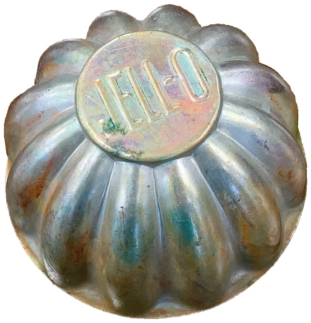


Figure 3.103 *A vintage Jell-O mold*

Additive Process: Stencil, Stamping, and Layering

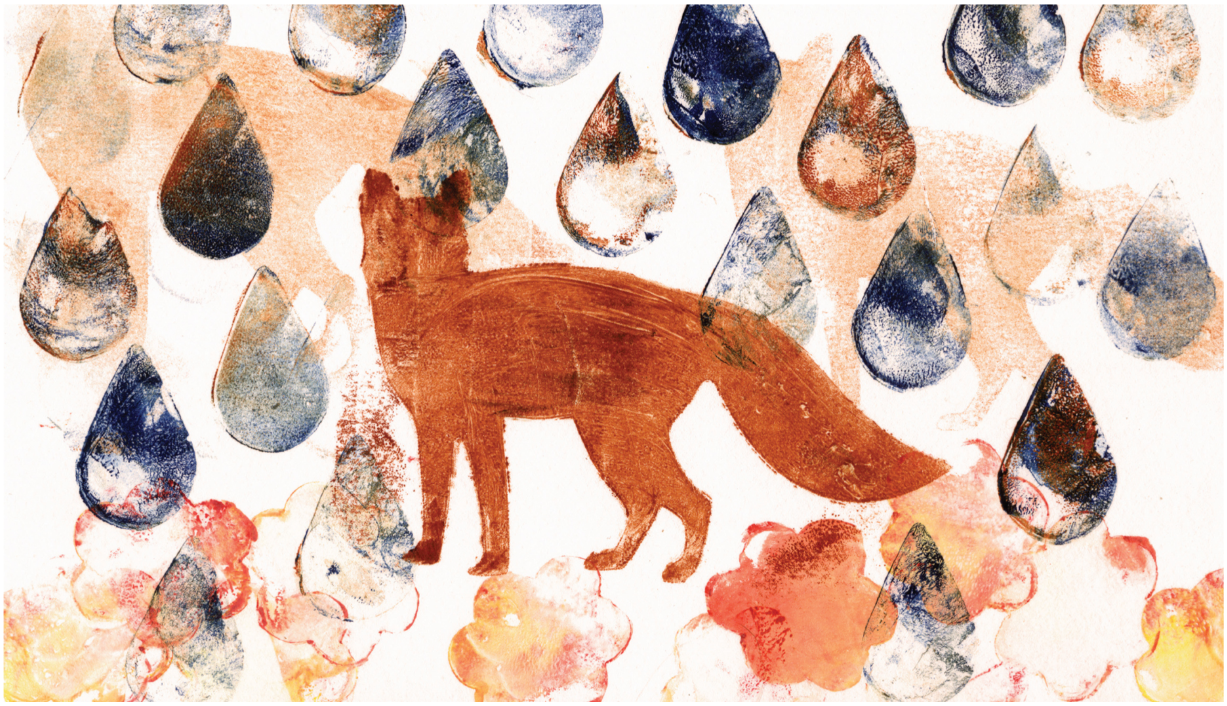


Figure 3.104 *Finished print using a stencil, gel stamps, and ghost prints*

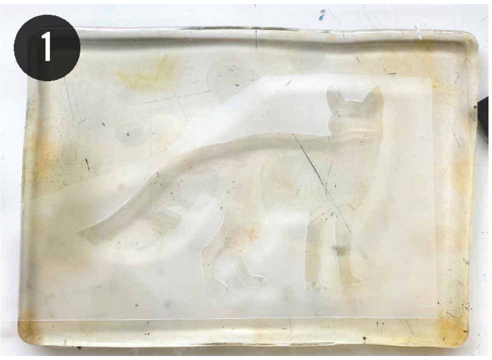


Figure 3.105

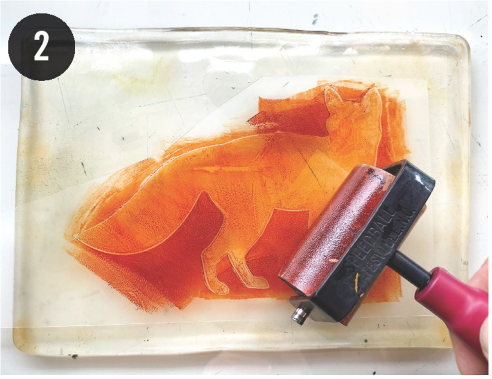


Figure 3.106

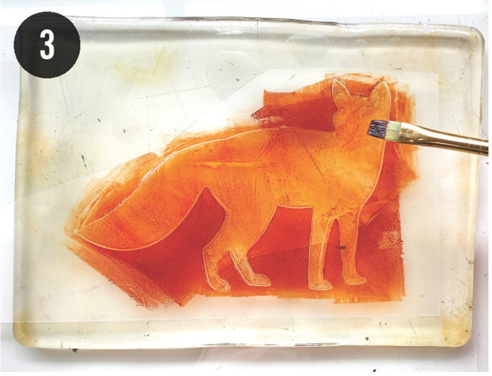


Figure 3.107

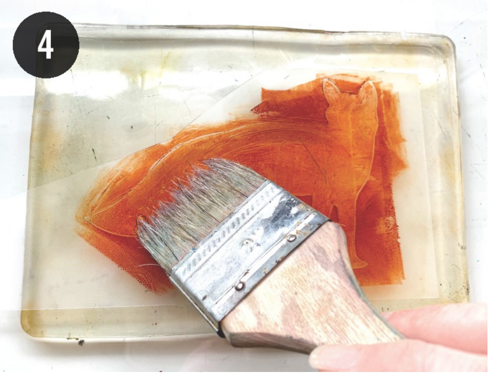


Figure 3.108

Figures 3.105–3.108

(1) Place stencil on the plate. Protect areas that you do not want ink on with paper if your stencil does not have a sufficient border. If you get ink where you do not want it, use a baby wipe to remove it.

(2) Roll on ink with a brayer.

(3) If you need to get into tinier places, use a small brush.

(4) A larger brush is lightly swept over the ink to create texture to suggest fur.

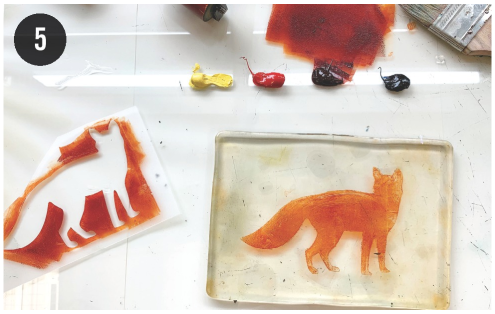


Figure 3.109 *Remove the stencil before printing.*

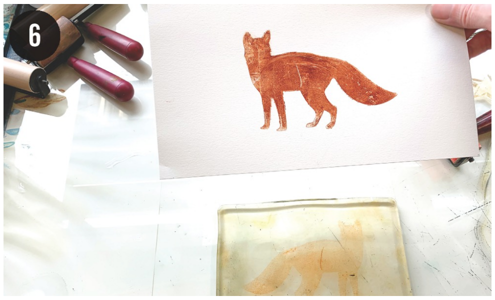


Figure 3.110 *Print is shown with ghost image remaining on plate; enough to print from again.*

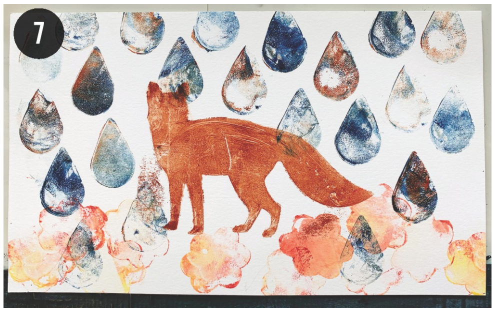


Figure 3.111 *The print was then stamped with gel shapes. (See below for directions.)*

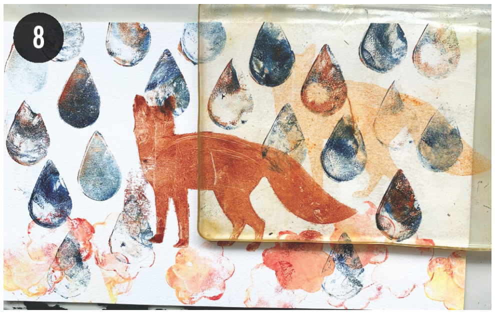


Figure 3.112 *The ghost image on the plate is placed over the print and pressed down to transfer the ink.*

Stamps from a Homemade Gel Plate

One of the benefits of making your own gel plate is that you can cut it into any shape you want. Using sharp cookie cutters, a variety of shapes were created to use as stamps. (Figure 3.113)

Once you are done, you can melt them and reform back into a new plate.

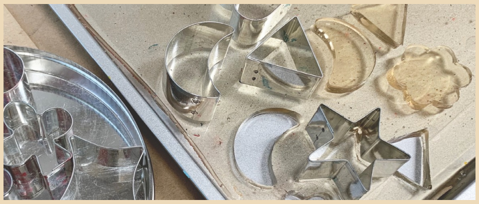


Figure 3.113 *Stamps cut out of homemade gel plate*

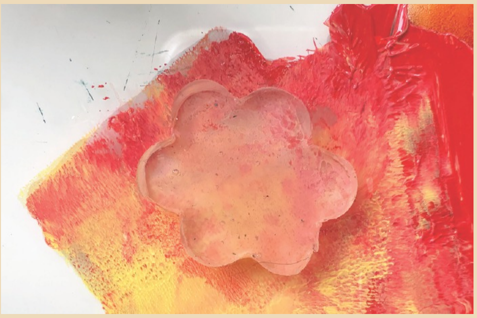


Figure 3.114 *Cookie-cutter gel stamp*

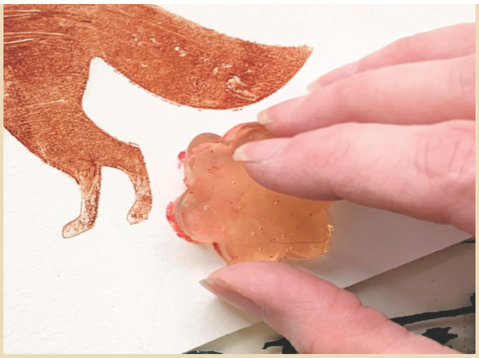


Figure 3.115 *Stamping a flower*

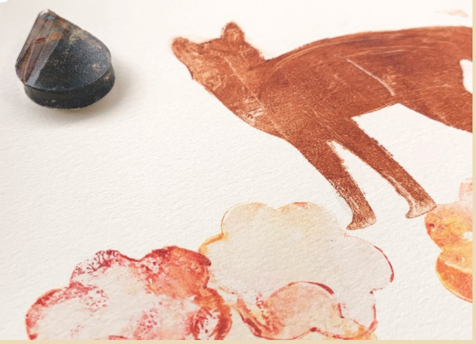


Figure 3.116 *Stamping a*

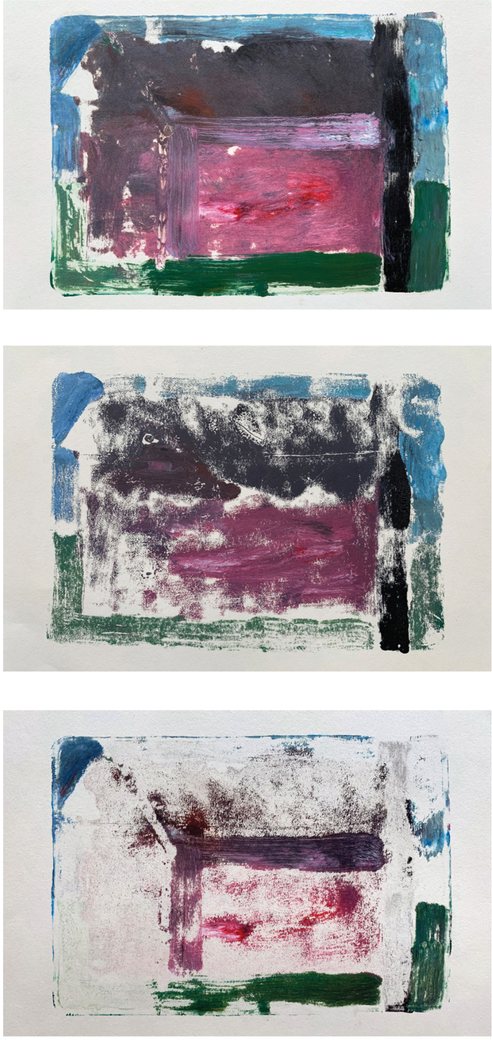
raindrop

Additive Process: Painting

Paint directly on the gel plate with ink, brushes, sponges, brayers, and other tools. Because the plate is transparent, you can even place an image under it as a guide. Here are some ideas for painting on the plate:

- Spritz or brush on water to get background washes.
- Paint opaquely like oil paint. (Figure 3.117)
- Use a brush, sponge, or baby wipe to soften edges, blend ink, or remove it.
- “Brayer paint” by mixing ink with a brayer on the plate and keeping the roller marks. (Figure 3.121)

- Combine other techniques to explore interesting solutions. (Figure 3.120)



Figures 3.117–3.119 *Painting directly on a gel plate with Charbonnel Aqua Wash results in a series of three prints. (Art by Jacob Janes)*

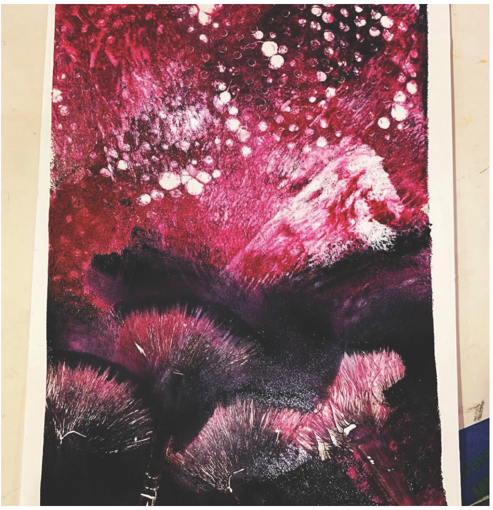


Figure 3.120 *Subtractive and additive techniques add up to a painterly print. (Art by Kyle Kuczma)*

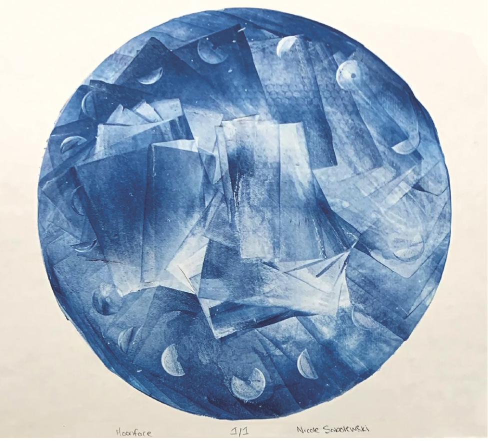


Figure 3.121 *A brayer painted print combined with stamped found objects (Art by Nicole Sobolewski)*

Image Transfer Process

Image transfers can be tricky and are a bit of trial and error in finding the right impression that will print well. Pick a visual that is high contrast; in other words, one that has bright and dark areas that are easy to see. Using magazines like *Vogue* and *National Geographic* works because of the type of ink, varnish, and paper they use for their slick high-quality images.

Once you find an appropriate periodical, the process is easy. Ink up the gel plate with solid ink, but do not lay it on too heavy or it will be a barrier between the paper and the plate. Press the magazine page down, pull back, and the image will appear on the plate. Then make your print and enjoy the magic!

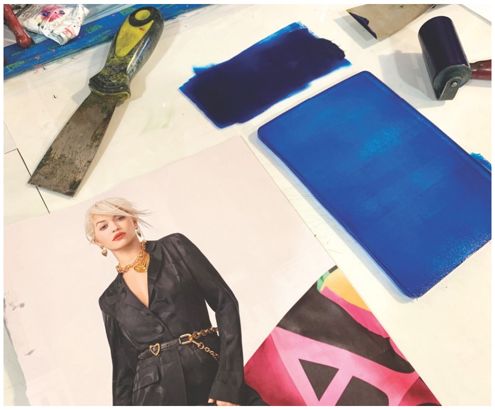


Figure 3.123 *Ink up the plate with solid coverage but not too heavy. This image is from* Vogue.

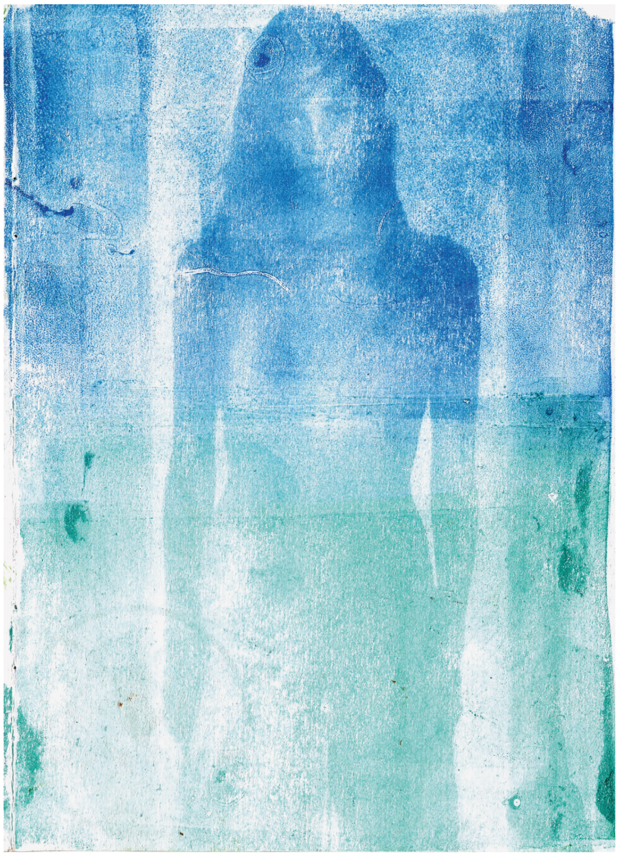


Figure 3.122 *The gel plate was inked in two colors and then printed with an image from* Vogue. *The lighter the ink, the more ghostly the image appears.*

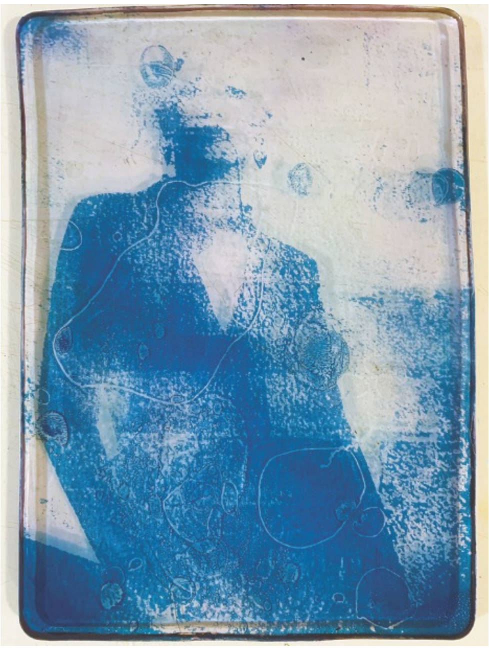


Figure 3.124 *Press the magazine page on the plate and pull back to reveal the image.*

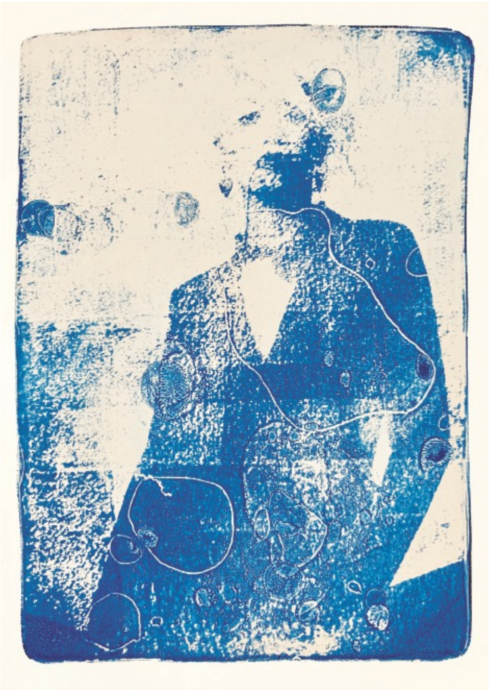


Figure 3.125 *Press the paper down to make the print.*

SEEDS

CHAPTER 4

Printing with Custom Stamps and Plates

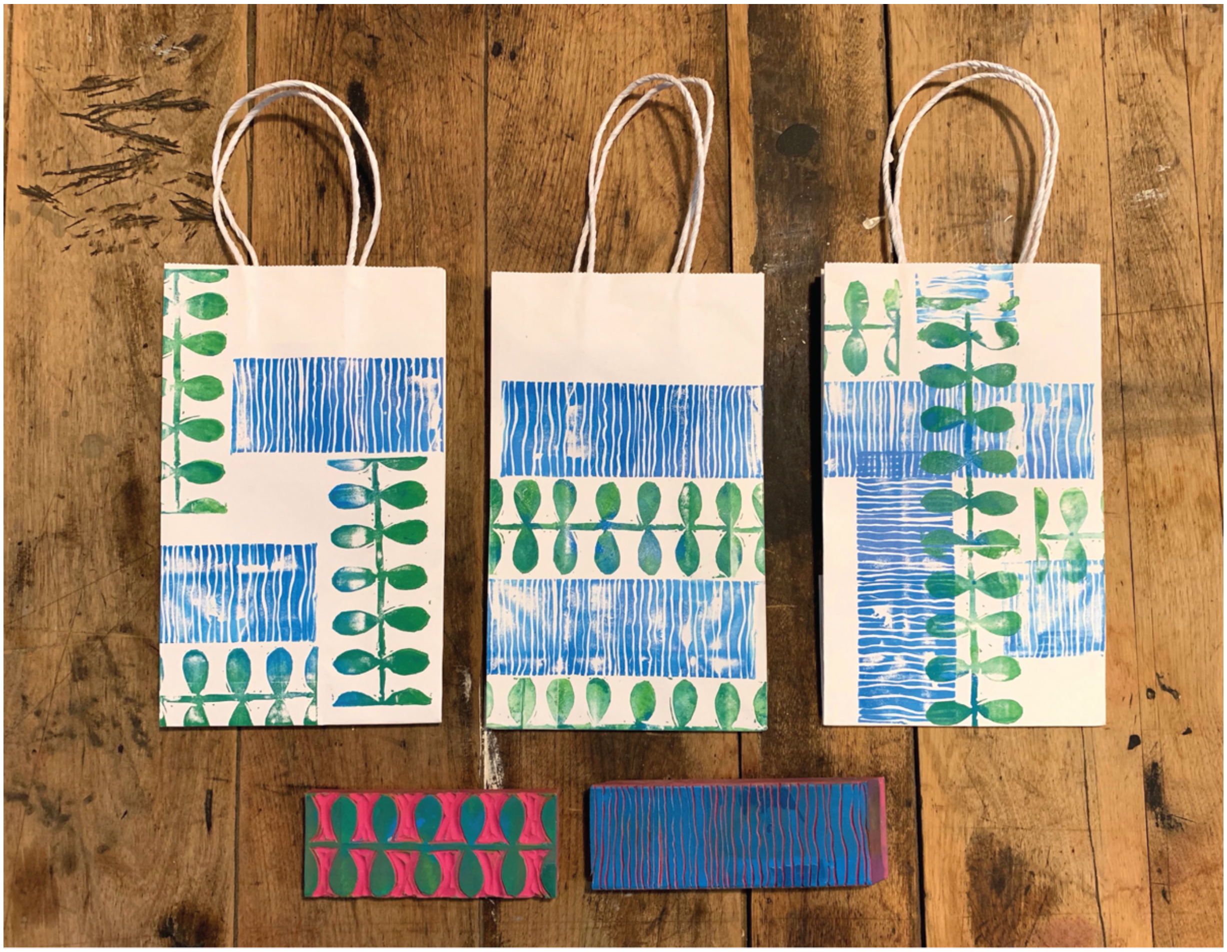
Project 5: Stamp a Custom Gift Wrap Collection

Project 6: Design and Print Seed Packets

Project 7: Make Tea Light Paper Luminaries

Project 8: Create Multicolor Fine Art Prints Using Traditional and Alternative Blocks

The four projects in this chapter build on skills learned in the previous chapters and appeal to all ages and skill levels. Easy to advanced options for carving stamps and plates are explored, appropriate for workshop settings or do-it-yourself at home.



PROJECT 5

Stamp a Custom Gift Wrap Collection

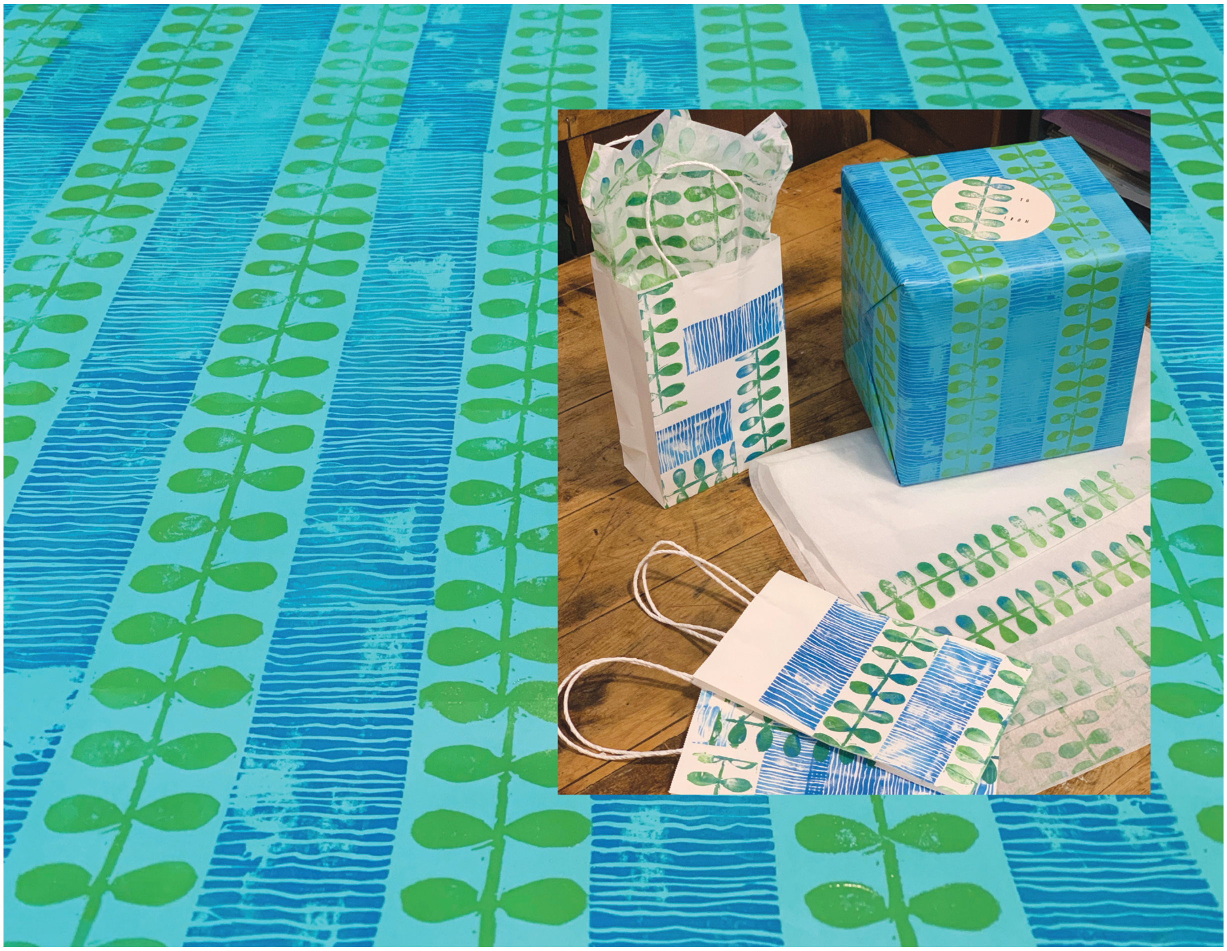
Creating your own custom gift wrap collection is perfect for a special event, holiday, or anytime you want to make a statement with your personal style. If you are a maker or crafter with a product, this is a perfect way to design your own line of packaging.

You will design and make stamps to create a patterned gift wrap collection that includes wrapping paper, gift bags, tissue paper, and matching gift tags.

Repeating elements can easily be stamped on any size surface in any direction or design that encourages exploration and multiple solutions.

(Figure 4.3)

Using easy-cut blocks or plastic rubberlike erasers, which can be found at any store with office supplies, you can easily and quickly cut designs. My favorite place is the dollar store for large and small erasers. Speedball's Speedy-Cut Carving Blocks and Dick Blick's



Figures 4.1 *(left)*, **4.2** *(above)* **& 4.3** *(inset) Gift wrap collection created with only two stamps and two ink colors.*

E-Z-Cut Printing Blocks are great for carving stamps too.

Making stamps should be fearless and fast. They are small and inexpensive and if you mess up, it is no big deal. Start over on the other side. The blocks can be shaped with a utility knife and carved with a linocut tool. Refer to chapter 2 for a review of relief tools and how to cut.

Process

Step 1 Plan your design. This example of gift wrap is designed to be an all-purpose collection. Inspiration for this look comes from water and a vine. Make sure you have all your papers, gift bags, and tag items ready to go because you will want to work efficiently and print items in bulk. A great place to buy blank gift paper and bags is the dollar store.

Supplies

- ☐ Blank paper gift bags
- ☐ BBlank wrapping paper
- ☐ BTissue paper
- ☐ BPrecut gift tags (or make your own)
- ☐ BPlastic erasers or easy-cut synthetic blocks to cut for stamps
- ☐ BInk and brayer
- ☐ BBaby wipes for cleaning

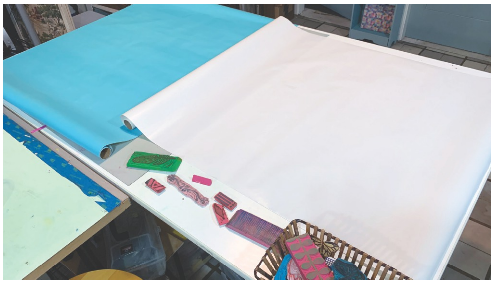


Figure 4.4 *Printing wrapping paper takes up a lot of space. Work on a large table with easy access to all sides. Roll out only the size you need. Do not try to print the whole roll the first time trying out this project.*

Step 2 Gather, design, and cut stamps to use, and lay out the items to print. Find a big surface to work on. (Figure 4.4) If you do not have a large table, try a smooth floor or an oversize piece of Masonite or plexiglass—anything that gives you a large, flat surface you can access from all sides.

As you design and cut stamps, you will develop a stamp library, allowing endless varieties of motifs. (Figure 4.11)

Step 3 Practice on scrap paper to figure out patterns and color combinations, especially if printing on color paper such as the blue used in the example. Cut off a small portion of the paper to test accurately and use one of the gift bags as a test print. (Figure 4.9)

Expect color shifts if using anything other than white paper. Notice in Figure 4.3 how the green on the blue paper looks more yellow than the green on the white gift bags, even though it is the same ink.

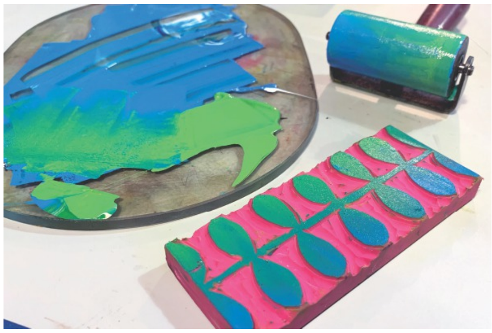


Figure 4.5
The blue and green is blended on the roller to create variation in color for the leaves.

To create more variation in the color but still sticking to the two-color palette, mix the green and blue on the roller as shown on the tissue paper and gift bags. (Figures 4.8 & 4.9) It makes for a more interesting design that still matches the overall look.

Step 4 Print the gift bags, wrapping paper, and tissue paper all in one session, so the ink colors match. It is difficult to match inks at a later date because it dries slightly darker. Or if you want to do multiple print sessions, mix enough ink to save for later.

- If overlapping inks, print the lightest color first.

- Evenly roll the ink on the stamp with a brayer. Press the stamp on the paper firmly and evenly. If needed, rock it slightly to get a clean impression on the outer edges. Make sure to work on a smooth, flat surface or you may get uneven impressions.
- Let the first color dry for at least one hour or overnight if printing a second overlapping color.
- When finished printing, let dry for a few days before wrapping gifts. In case of high humidity, let dry one week.

Step 5 To make the gift tag, cut out from the printed paper, print on precut tags, or try other formats. In this example, I used one of the leftover coasters from project 1 and rubber-stamped letters. Another option is to make a note card with similar colors and at least one of the stamps to tie into the design. (Figure 4.10)

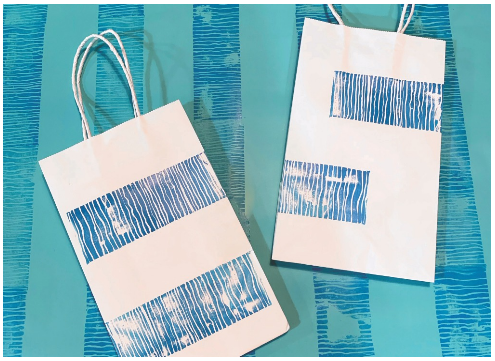
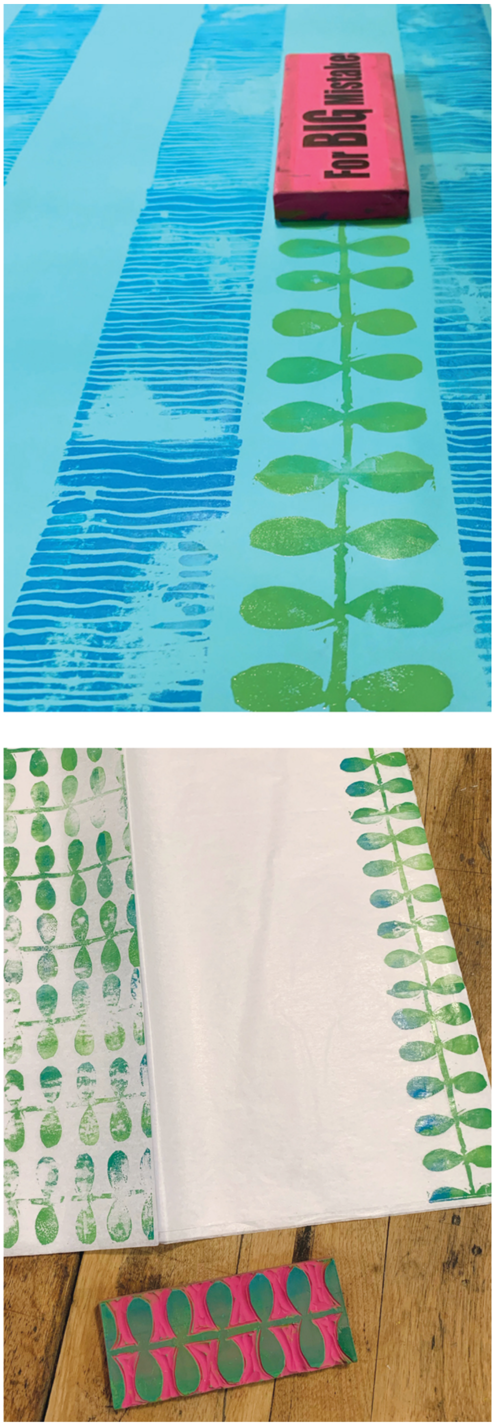


Figure 4.6
When printing the first color, print all pieces in the collection that use that color to make the process more efficient. To create the continuous wavy line, the stamp was printed end to end, inking up every third impression.


For BIG Mistakes

Figures 4.7 *(top)* **& 4.8** *The second color is printed on the wrapping paper and tissue paper. The stamp was printed end to end to create a continuous vine.*

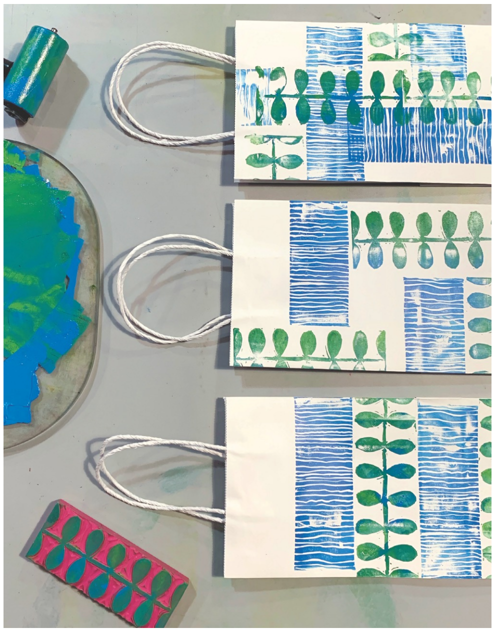


Figure 4.9 *The second color, a blend of the blue and green, is printed on the gift bags. Different layouts of the two stamps are explored. The top bag is the practice print.*

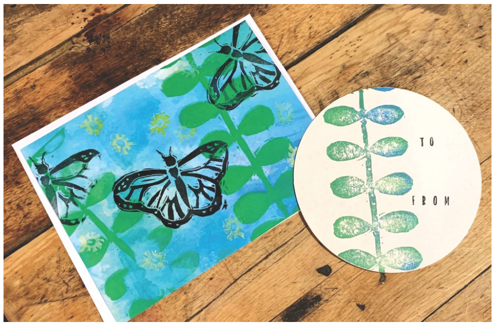


Figure 4.10 *Matching gift tag options could be a note card or a stamped paper coaster.*

Cleaning Tip

Use baby wipes to clean off the stamps. The oil in the wipes helps protect the surface.

Build Your Personal Stamp Library

As you move through these projects, you will develop a collection of stamps, custom cut or purchased. The fun of making and collecting them is variations on the same design can be created quickly, such as the gift bags on these pages. They can be used on paper, on textiles, and combined with other print processes.

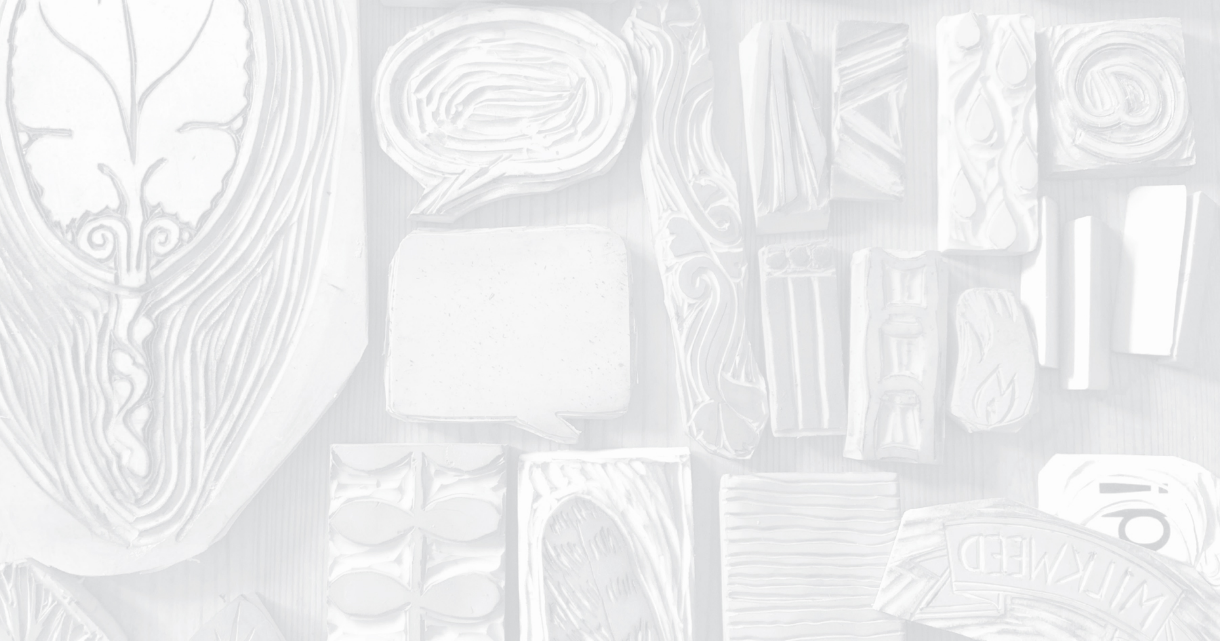


Figure 4.11 *Handmade stamp library*

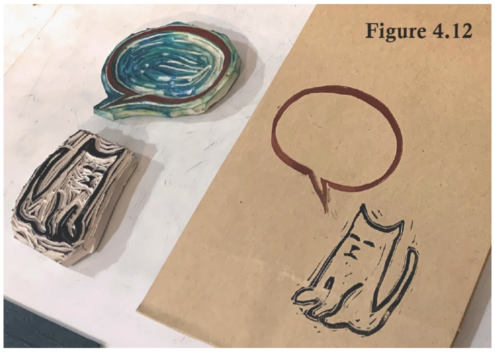


Figure 4.12

Figures 4.12–4.15 *The cat and talk bubble gift bags were made using the same three stamps, ink colors, and letter stamps.*

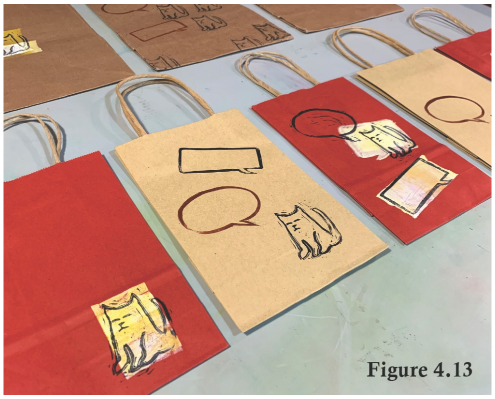


Figure 4.13

Figure 4.13 *Different colors and sizes of gift bags create more variety.*

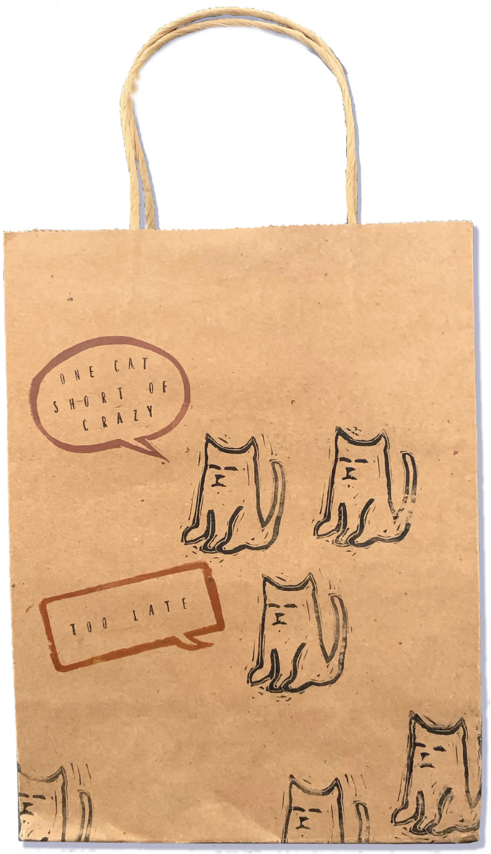

ONE CAT SHORT OF CRAZY
TOO LATE

Figure 4.14

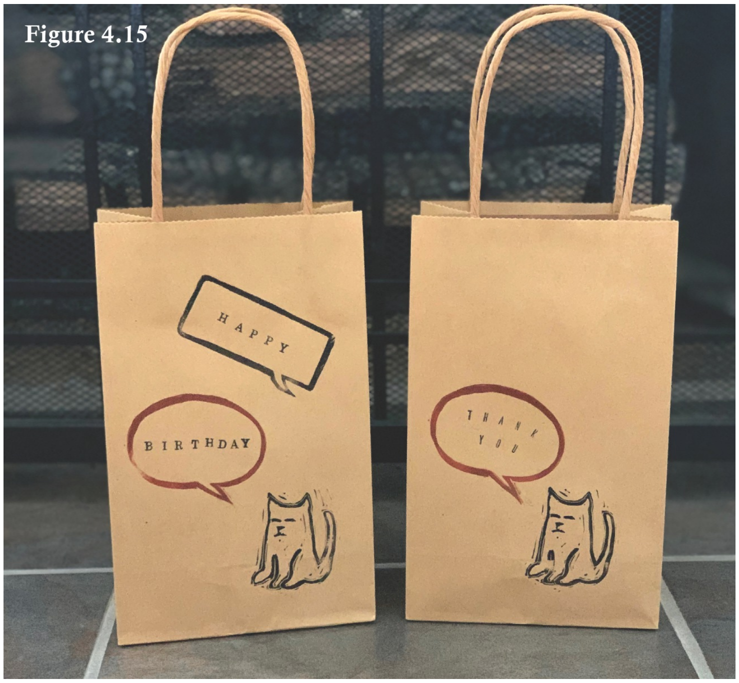


Figure 4.15
HAPPY
BIRTHDAY
THANK YOU

Figure 4.15

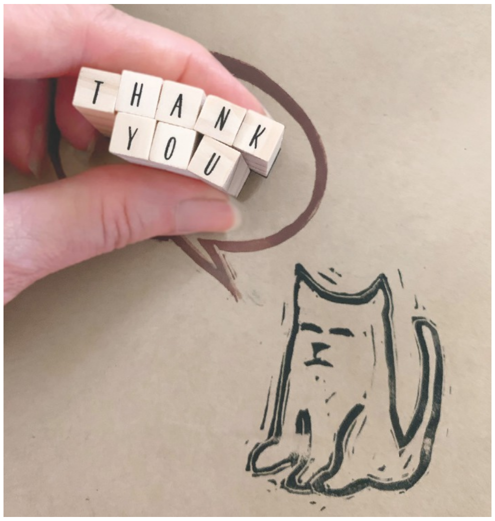


Figure 4.16 *First, check how the phrase fits in the talk bubble before printing.*

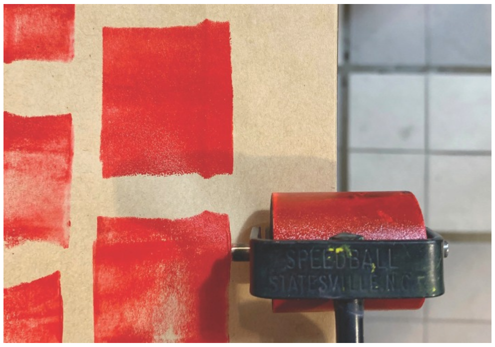
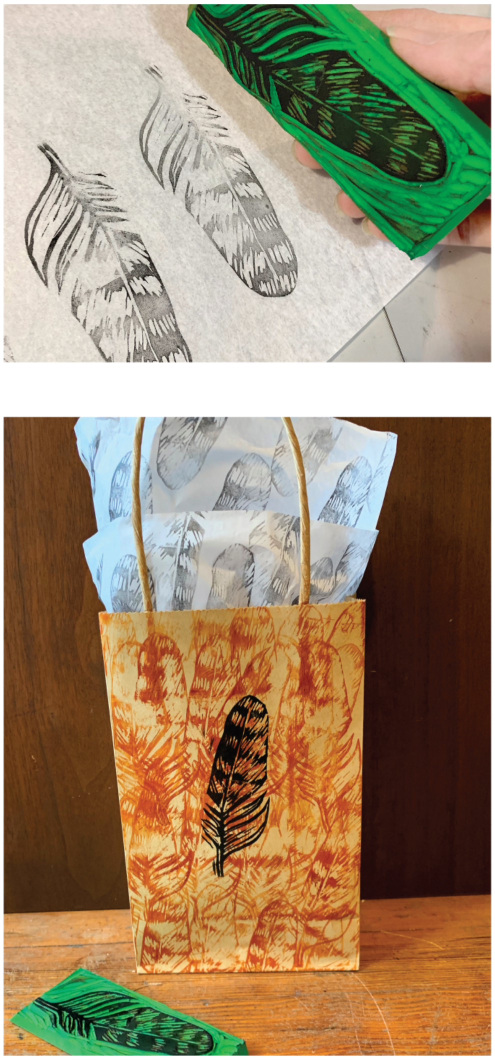
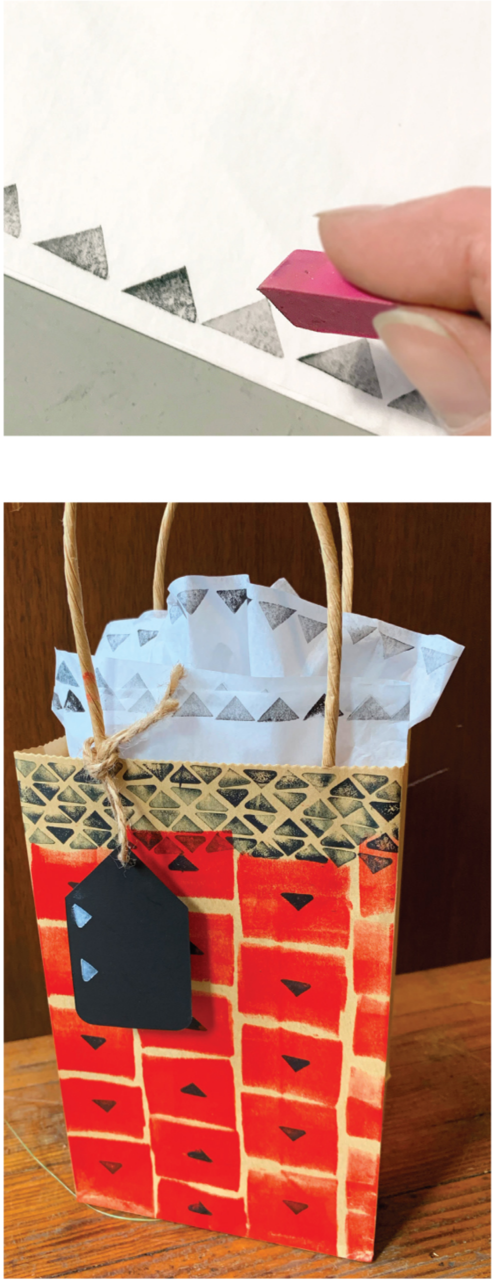

SPEEDBALL
STATESVILLE, N.C.

Figure 4.17 *(below) Use a brayer to roll on a block of color before stamping on top. To roll color on the edge without getting ink on the table, move the bag to the table edge.*



Figures 4.18 & 4.19 *A single feather stamp was used to make a gift bag and tissue paper.*



Figures 4.20 & 4.21 *A triangle stamp unifies the gift bag design from tissue paper to gift tag.*

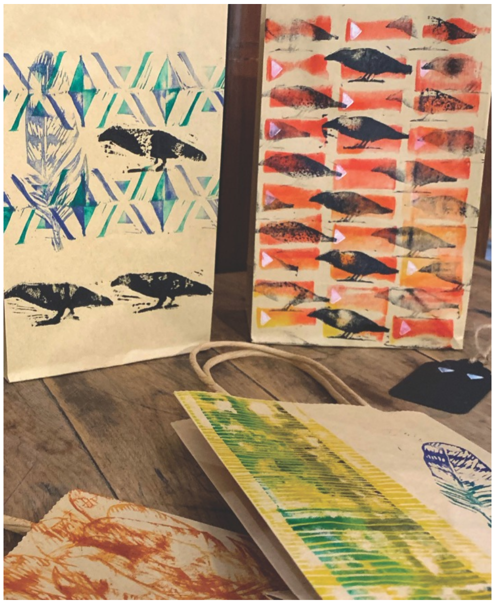


Figure 4.22 *Various designs made from the stamp library.*

PROJECT 6

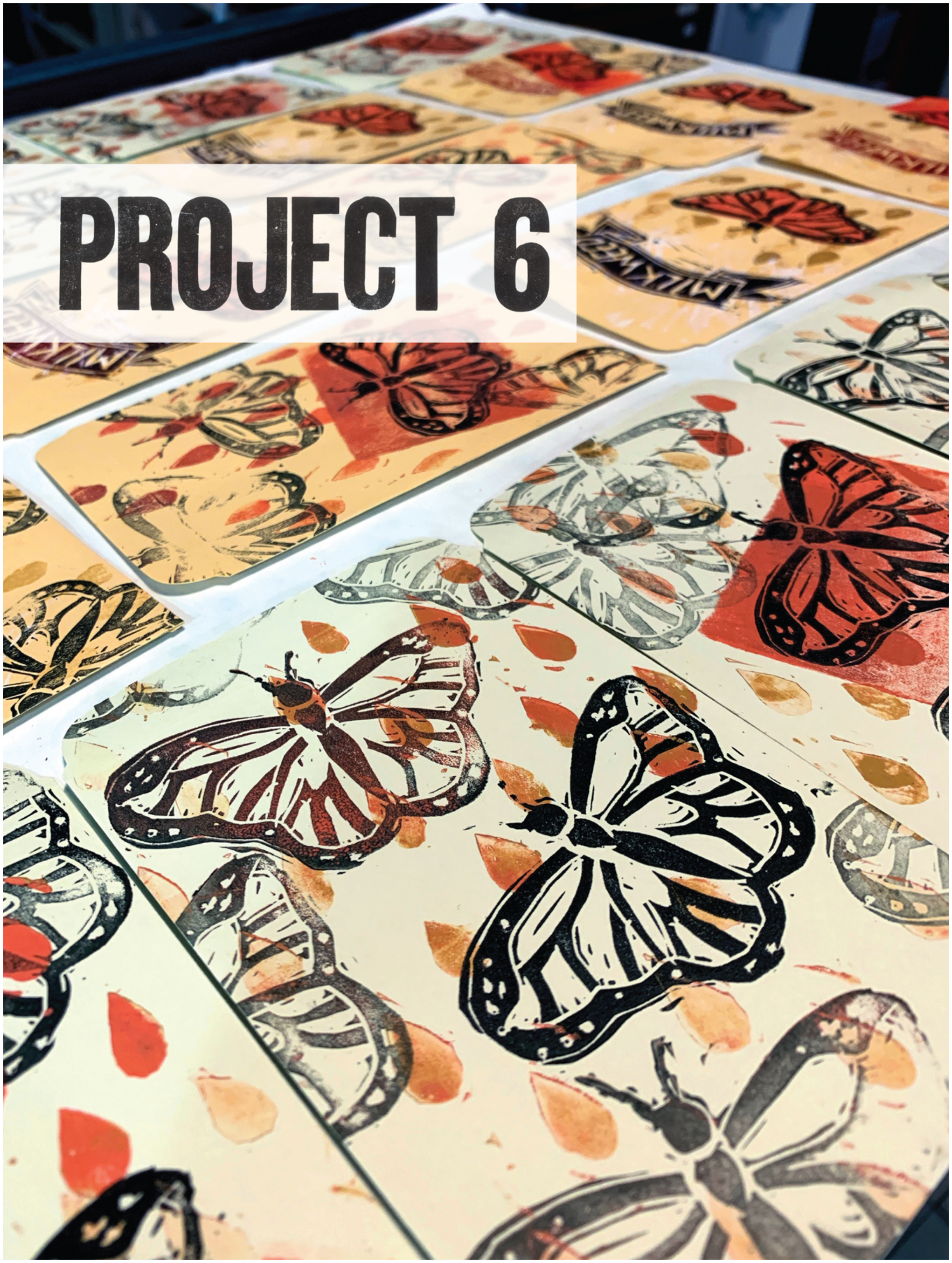


Figure 4.23 *Variety of seed envelope designs using the same set of stamps and ink colors*

Supplies

- ☐ BBlank premade seed packets (or make your own from the template)
- ☐ BRelief ink and brayer
- ☐ BPlastic erasers or easy-cut blocks
- ☐ BLinocut handle and blades
- ☐ BOptional: rubber letter stamps
- ☐ BBaby wipes

Design and Print Seed Packets

Start collecting those garden seeds now. Harvesting, sharing, and storing flower and vegetable seeds has never been more fun. You can design custom seed packets that show off what is inside or make generic envelopes for all-purpose use—even for seed money gifts.

This project will take you through the steps of using multiple stamps and layering color to make miniworks of art on seed envelopes. Buy blank seed packets or make your own using the template below. (Figure 4.25) Then it is simply cutting a few stamps and printing.

They will make your gardening friends smile!

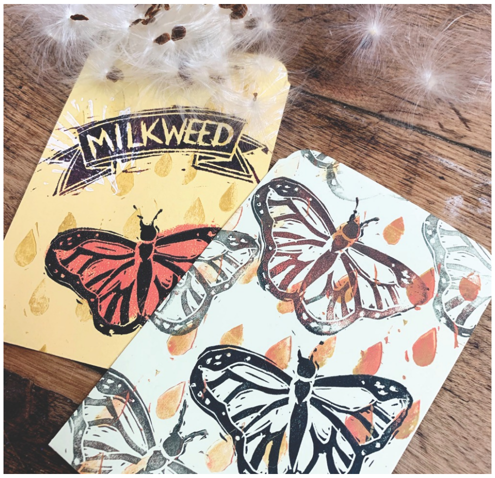
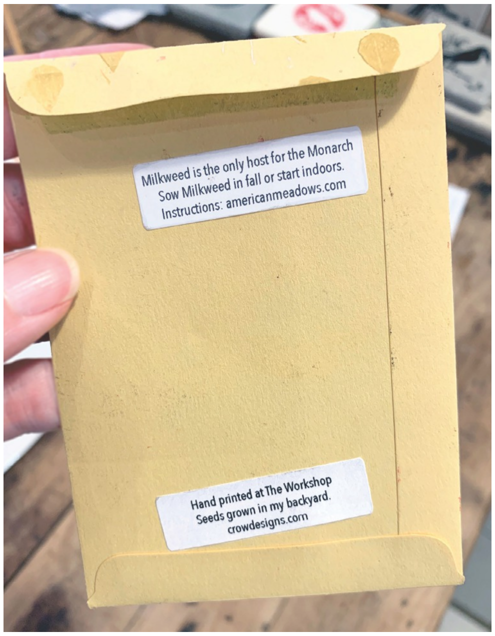


Figure 4.24 *Seed packets can be specific to the contents or more generic without lettering.*

Figure 4.25 *Template for seed envelope*



Milkweed is the only host for the Monarch
Sow Milkweed in fall or start indoors.
Instructions: americanmeadows.com

Hand printed at The Workshop
Seeds grown in my backyard.
crowdesigns.com

Figure 4.26 *Back of envelope with stickers*

Back Panel

Final size: 3.5" x 4.7"

Top Flap

To Use This Template

1. Copy on to a piece of paper.
2. Cut out the packet on the solid black outline.
3. Fold on the dotted blue lines.
4. Use a glue stick on the yellow areas to make the packet.
5. Print on the front panel. Note: You can print flat first if you want the design to wrap around to the back. Then glue.
6. Use the back panel to write planting instructions and the date. Printing out a sticker is a quick and easy way to get information if you are doing multiple packets. (Figure 4.26)
7. After printing, add seeds and glue shut.

Front Panel (print here)

Bottom Flap

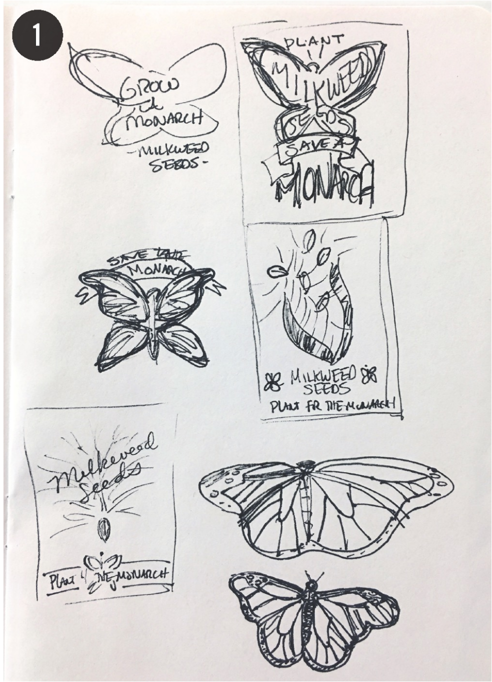

1
GROW
the
MONARCH
-MILKWEED
SEEDS-
PLANT
MILKWEED
SEEDS
SAVE A
MONARCH
SAVE THE
MONARCH
MILKWEED
SEEDS
PLANT FR THE MONARCH!
Milkweed
Seeds
PLANT 4 THE MONARCH

Figure 4.27 *(1) Develop ideas in a sketchbook. This concept was inspired to help save the monarch butterfly. The caterpillar relies solely on milkweed while in its larva stage.*

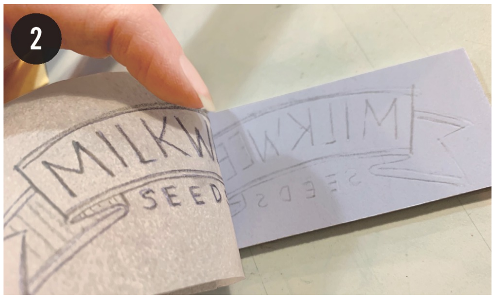

2
MILKW
SEED

Figure 4.28 *(2) Transfer design to plate. Refer to chapter 2 or project 8 for instructions.*

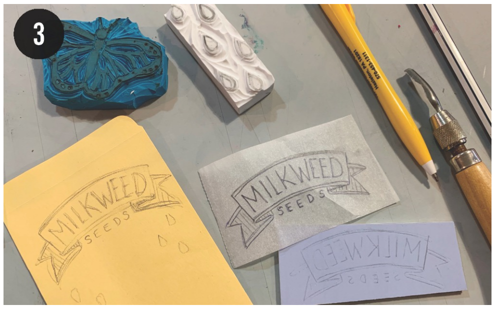


Figure 4.29 *(3) After drawing out designs on the plate/ stamp material, carve out images. Make sure the design fits the envelope size.*

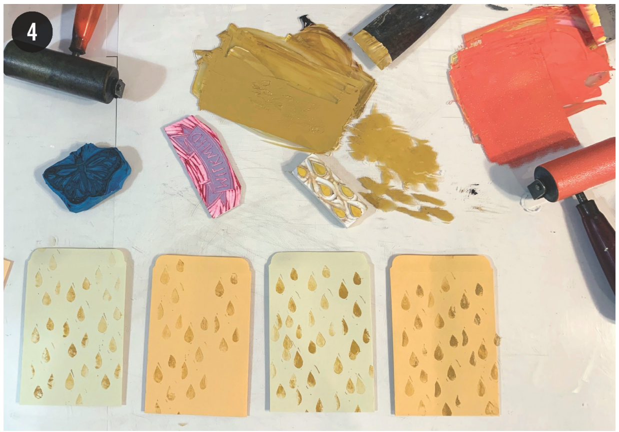


Figure 4.30 *(4) Colors for the project are readily available for mixing and printing.*

Blank packets are lined up for bulk printing.

The lightest color is printed first in a random patterned background.

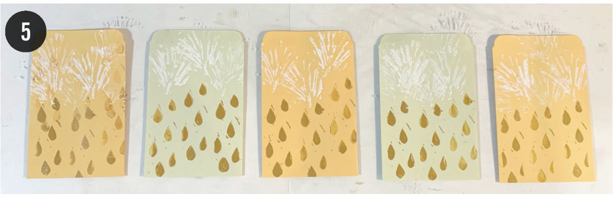


Figure 4.31 *(5) Variation in the background design is explored by adding abstract white puffs with a Speedball stamping disc. (Figure 4.36)*

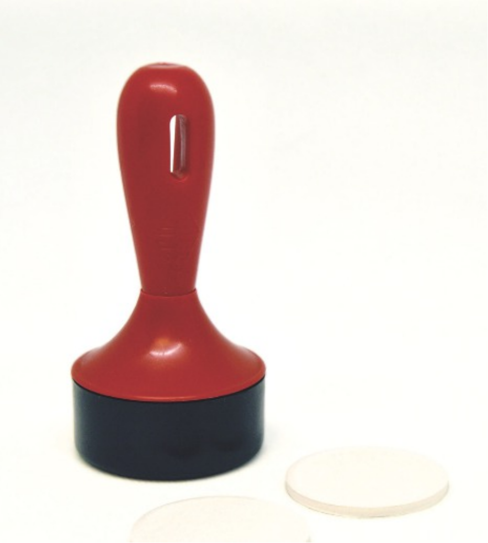


Figure 4.32 *Speedball stamping tool*

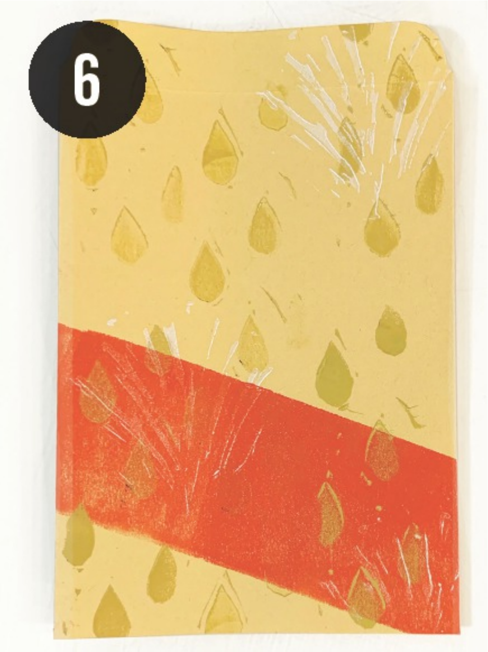


Figure 4.33 *(6) Rolling the inked brayer creates the orange stripe.*

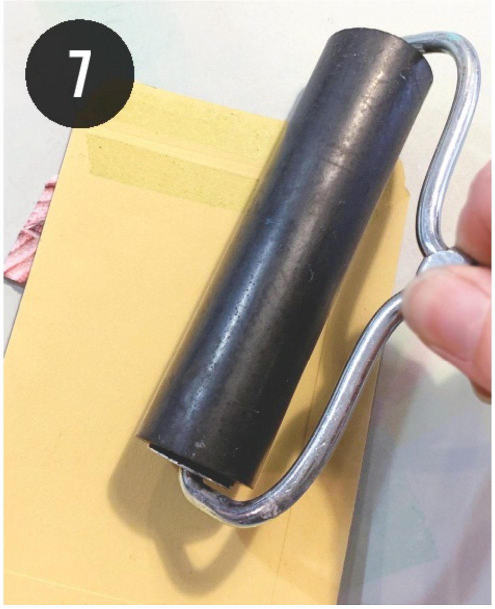


Figure 4.34 *(7) The title plate is printed using a hard roller to add pressure because this plate type does not work as a stamp.*

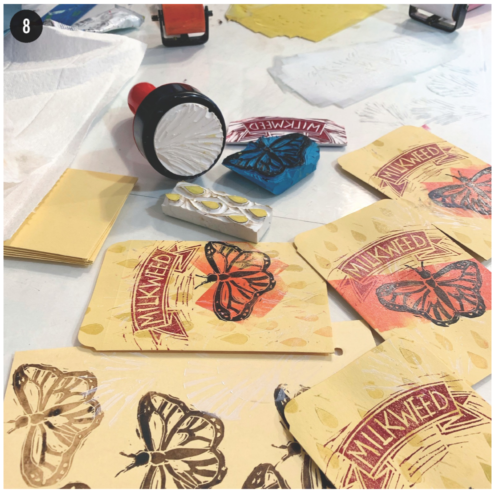


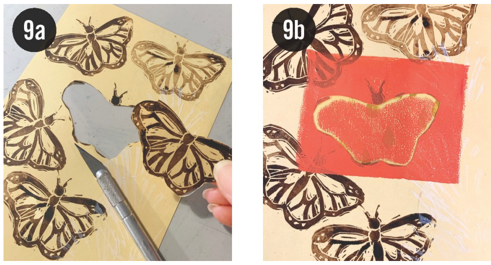
Figure 4.35 *(8) As a final step, a butterfly was stamped over the colors. Black is normally printed last.*

This first print design uses two eraser stamps, a stamp disc, a synthesis plate, and a brayer for the orange stripes.

Note in the lower left-hand corner, a butterfly was test printed on scrap paper. This will come in use in the following design revision.

Cleaning Tip

Save on paper towels! Newsprint and old phone books are perfect for cleaning up.



Figures 4.36 *(9a)* **& 4.37** *(9b)*
Rather than rolling out an orange stripe like the previous design, another approach involves cutting a stencil to confine the orange to the shape of the butterfly. The orange ink is rolled over the stencil to create the background color, then the butterfly is stamped on top.

Taking one of the test prints, cut out a butterfly towards the center to make a stencil. This will leave enough paper around it to protect the print when rolling the ink.

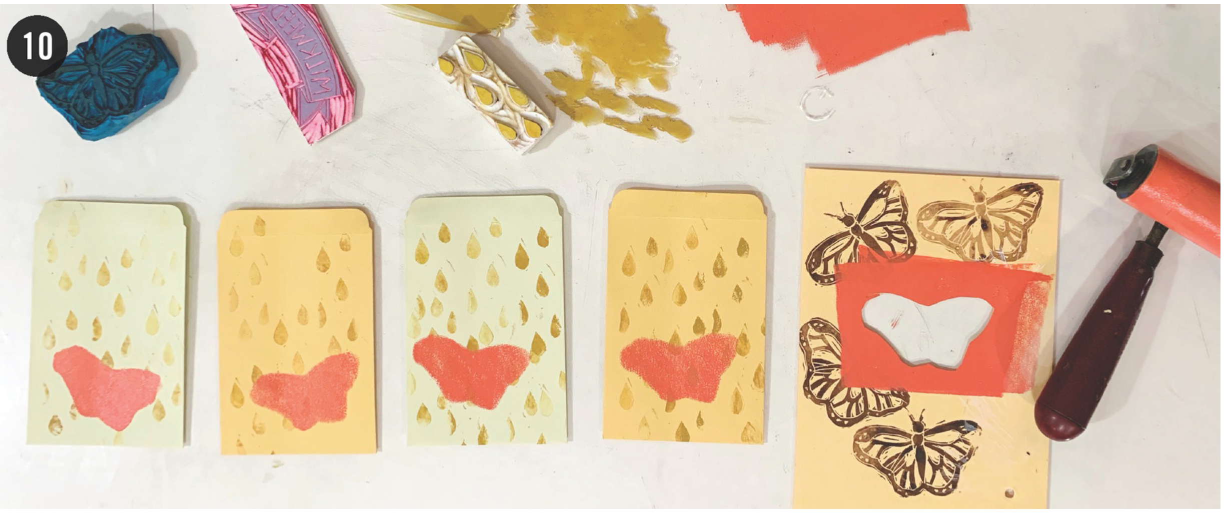


Figure 4.38 *(10) Use the stencil on each envelope to make an orange background.*

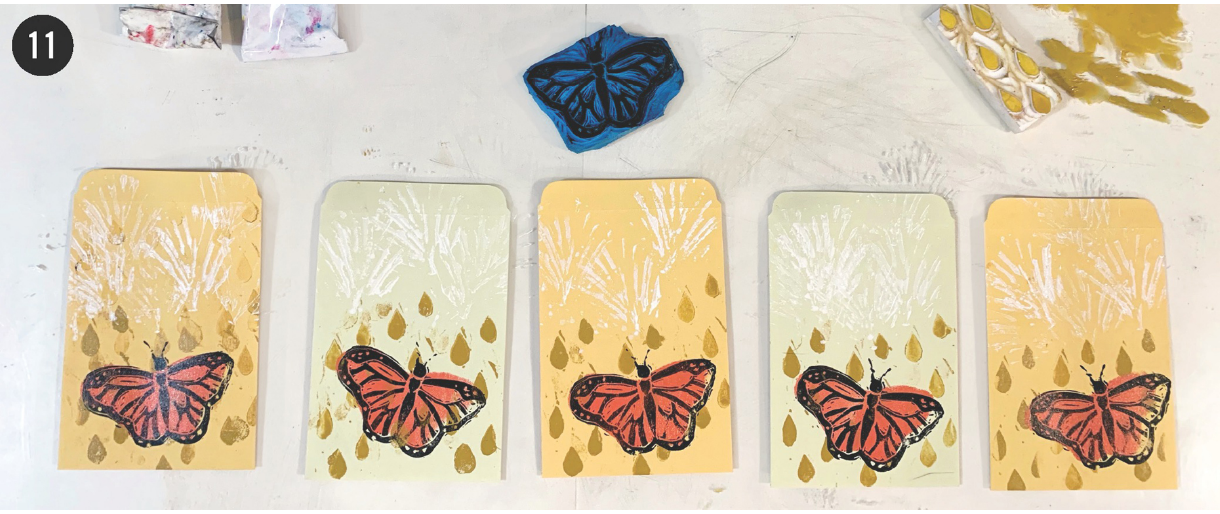


Figure 4.39 *(11) Next, stamp a butterfly on top of the orange background. Because the eraser stamp is cut out in the shape of the butterfly, it is possible to accurately line up the stamp. Even if the registration is slightly off, it does not make a difference, because the design is playful and it adds to the handmade quality. Next, stamp white puffs and print the milkweed title plate.*

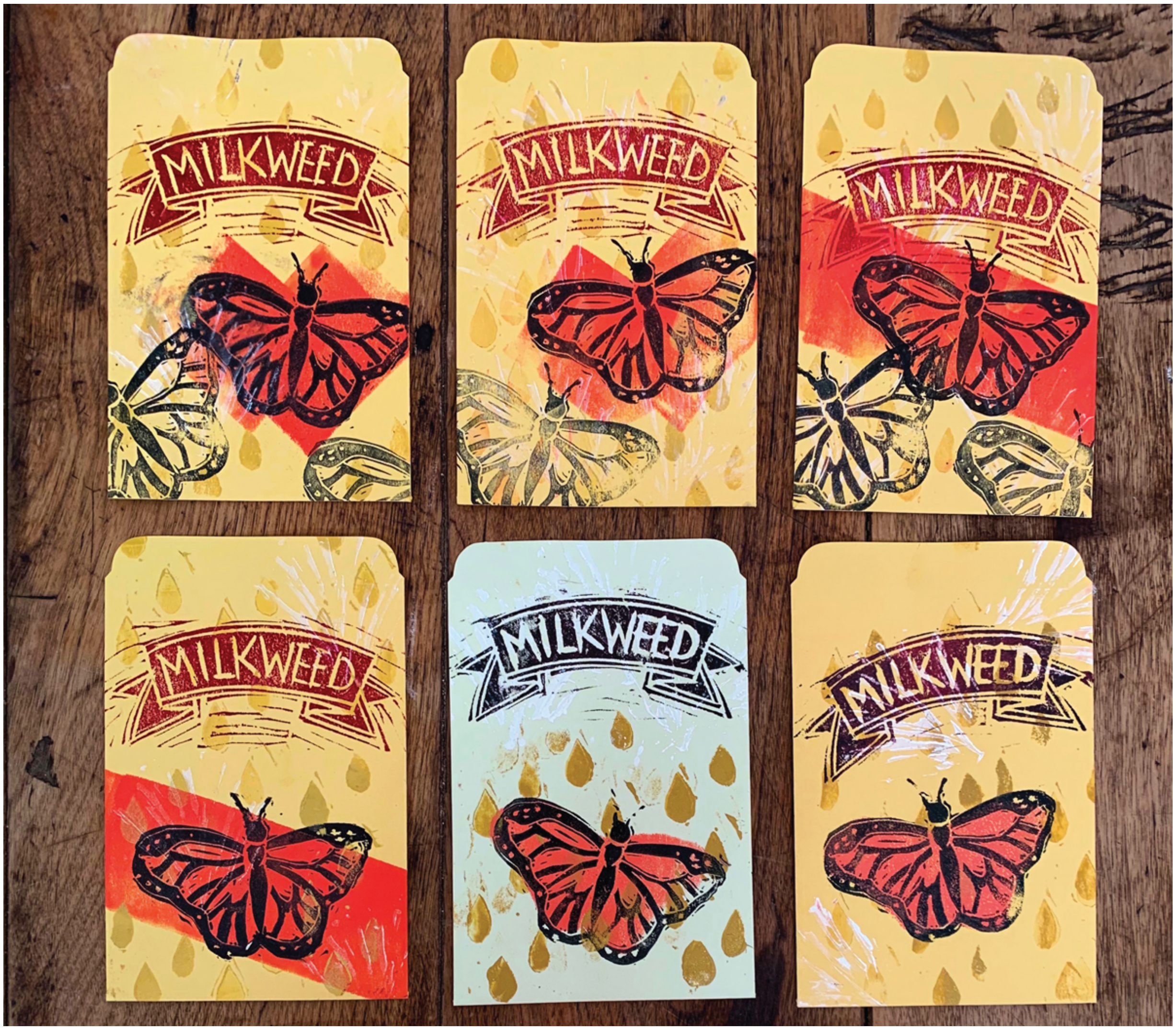

MILKWEED
MILKWEED
MILKWEED
MILKWEED
MILKWEED
MILKWEED

Figure 4.40 *Various solutions are achieved with the roller or stencil method.*

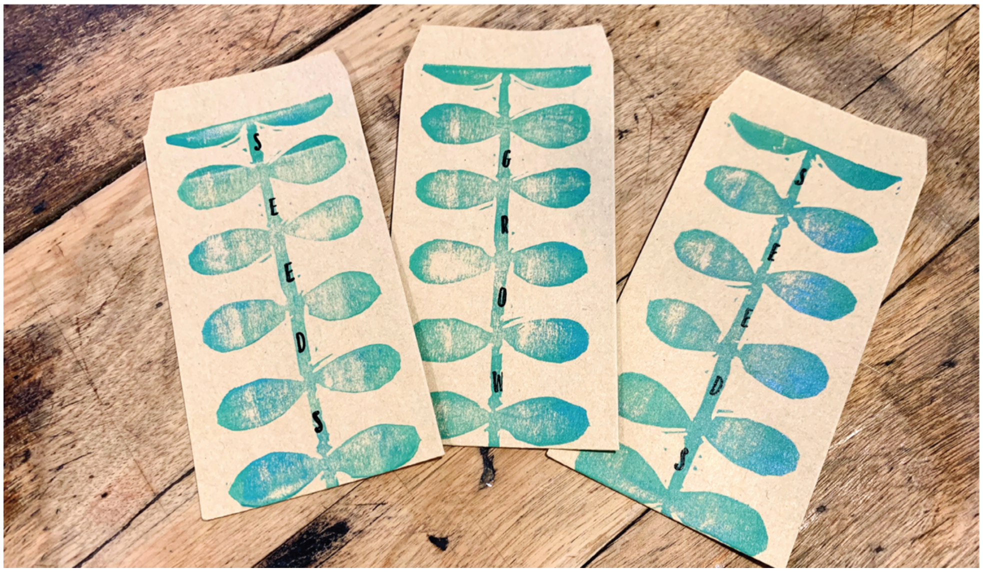


Figure 4.41 *Generic seed packets using a smaller size envelope and printed with the vine stamp and rubber letter stamps*

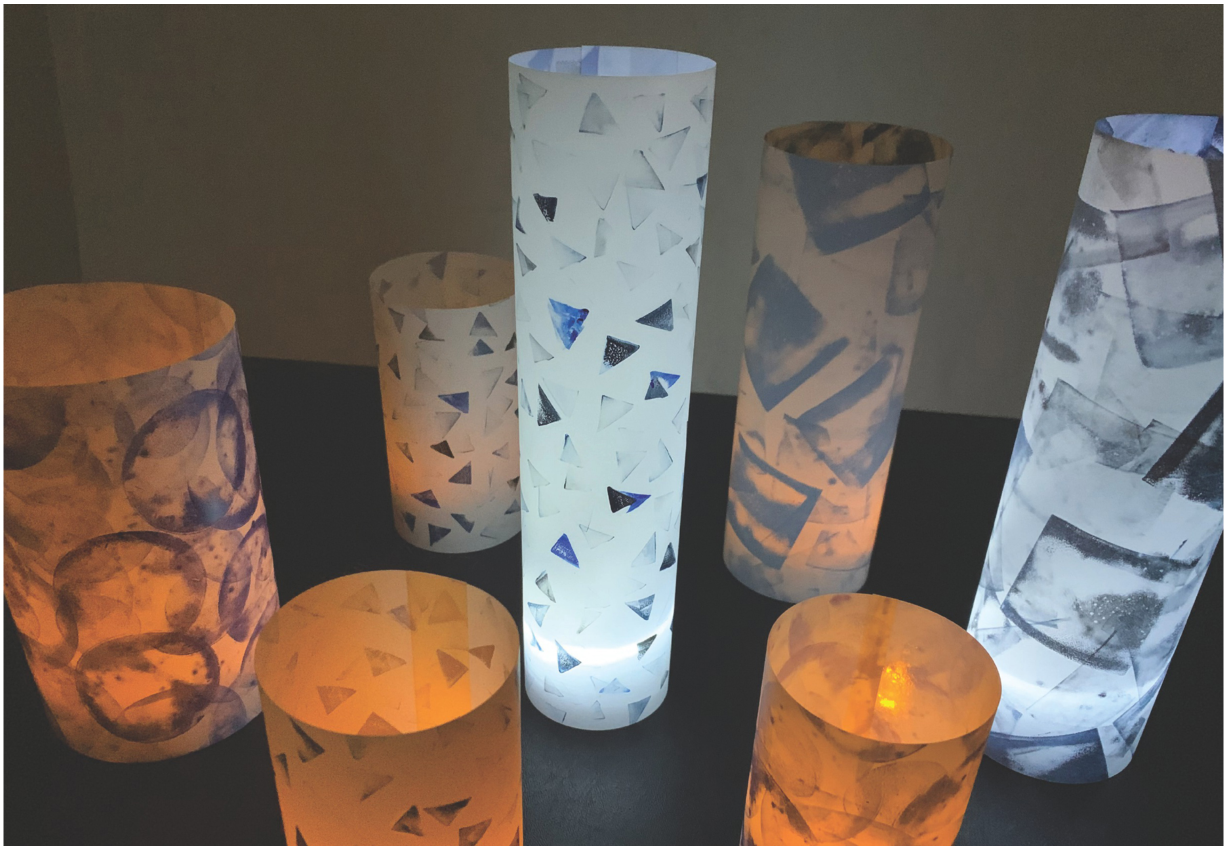


Figure 4.42 *Stamped tube luminaries made with vellum and lit with regular and LED tea lights*

PROJECT 7

Make Tea Light Paper Luminaries

Tea light luminaries, also called “lanterns” or “votives,” are perfect for table decorations for weddings, showers, holiday dinners, parties, or any occasion. Printing your own allows you to create as many luminaries as you need with little expense other than the lights themselves.

This project will show you how to print directly on transparent paper like vellum and easily create glowing cylinders or a holiday tree set, and then how to design, print, and construct a window-lined lantern, creating a lovely glowing one-of-a-kind paper light.

Luminaries work beautifully as decorations around the house or as a fun craft project for a group. Think about other formats and using different lights. Floating votives in a printed cellophane bag? How about a haunted house for Halloween? Or a blinking lighthouse? Maybe something challenging like a vintage TV with a printed screen? There are so many ideas for this project!

Tube Luminaries

We will start with this set of tube luminaries because it is an easy and fast process with elegant results. There is no need for templates or measurements because you can roll any size rectangle into a cylinder. Experiment with different heights and widths.

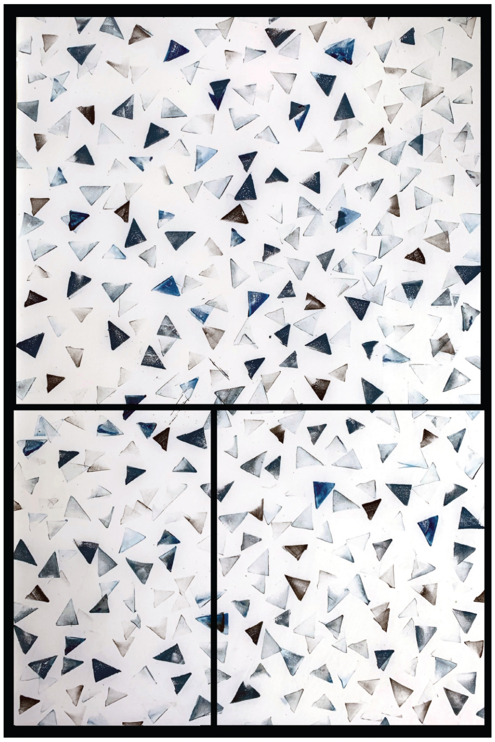


Figure 4.43 *A single print on vellum is cut up into three sections to make three cylinders.*

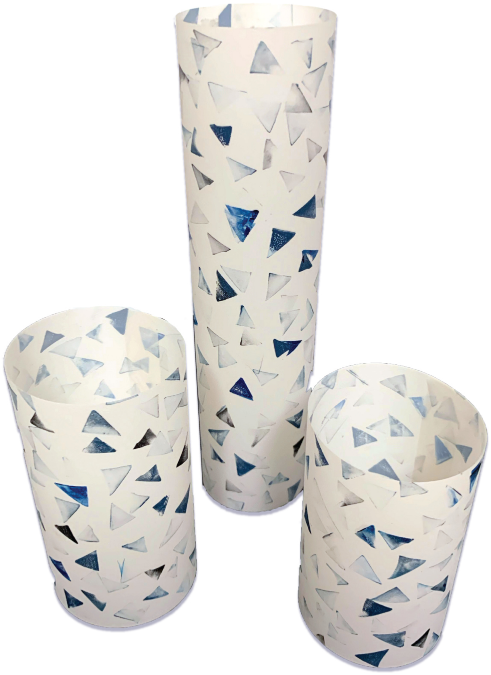


Figure 4.44 *Cylinders from one sheet of 11" x 17 " paper*

For this group of tube lights, three 11" x 17" sheets of vellum are stamped with different designs and then randomly cut. Make sure when they are rolled up that there is enough room for the tea lights. (Figures 4.43 & 4.44)

Step 1 Select stamps for each set. In this example, the stamps are an eraser cut into a square, a stamping disc tool using an uncut circle, and a triangle leftover from the end of a large eraser. (Figures 4.45–4.47)

Step 2 Prepare sheets of vellum or frosted Mylar of any size for each print design. A tabloid or 11" x 17" sheet of paper will yield two to three tubes, depending on height and width. Cut to size ahead of time to make sure you like the cylinder dimensions or cut down larger sheets after the prints dry.

Supplies

- ☐ BPapers: vellum or Mylar, tracing paper, and card stock
- ☐ BVarious ink colors, including gold and silver (use Speedball ink or stamp pads for gold and silver metallic)
- ☐ BBrayer and inking surface
- ☐ BX-Acto or utility knife
- ☐ BMetal ruler
- ☐ BTransparent tape
- ☐ BBurnisher/bone folder
- ☐ BStamps: easy-cut or erasers for stamps; premade stamps; pencil with unused eraser
- ☐ BBattery-operated tea lights

If you want to try other papers, select ones that are sturdy enough to stand on their own and semitransparent so the glow is visible but you do not see the actual tea light.

Step 3 Print your papers. To keep these tube designs unified so they all look good together, shades of blue and black are used. Blue is calming, and black adds contrast and elegant drama.

- The application of random overlapping patterns with simple geometric shapes keeps the overall theme tied together.
- When printing, ink up only after every four or five impressions to achieve the different values of light to dark.

Step 4 Let dry completely.

Step 5 Cut up sheets if not yet made to size. Apply transparent tape along the length of one inside edge, leaving part of the tape available to secure the other edge. Roll the tube, and burnish the tape down.

Step 6 Add a tea light and you are done!

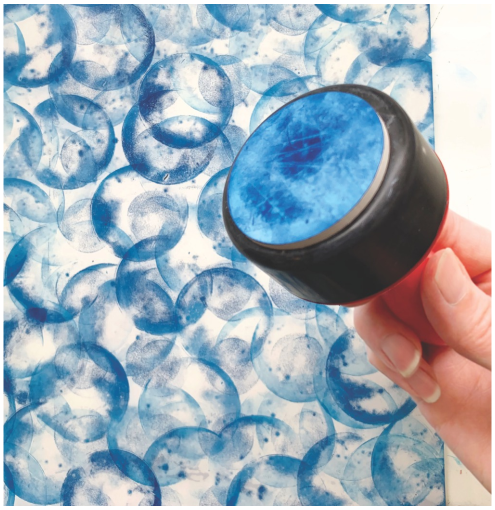


Figure 4.45 *This circle was stamped using an uncut disc that comes with Speedball's stamping tool.*

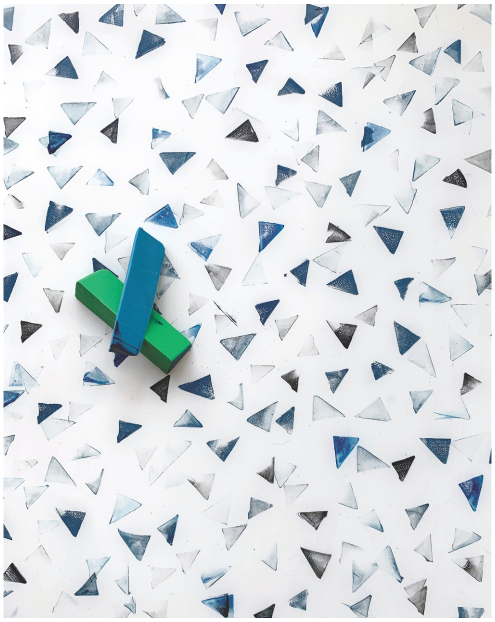


Figure 4.46 *The leftover end of a large eraser serves as an easy tool to stamp small triangles.*

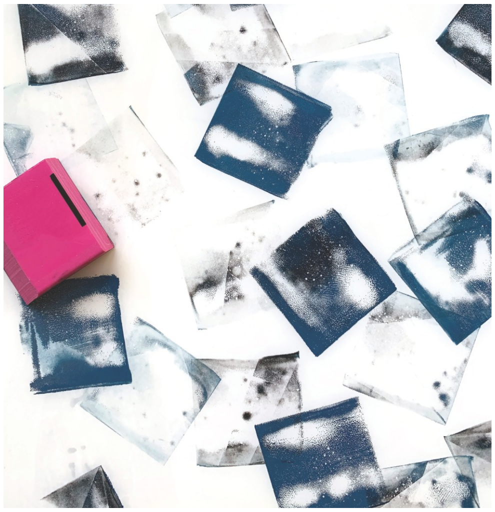


Figure 4.47 *A large plastic eraser was cut into a square.*

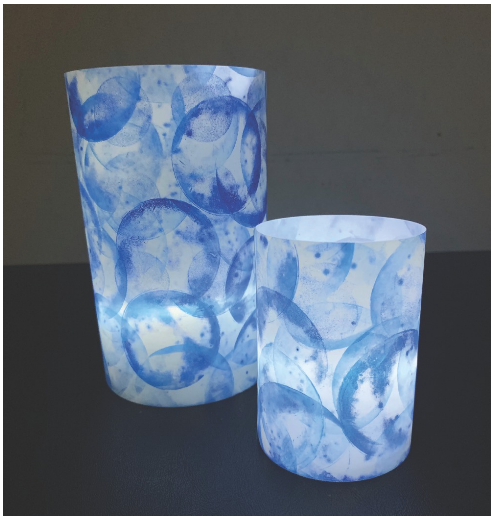


Figure 4.48 *Finished tubes with LED tea lights give off a bright, cool light that works well with blue.*

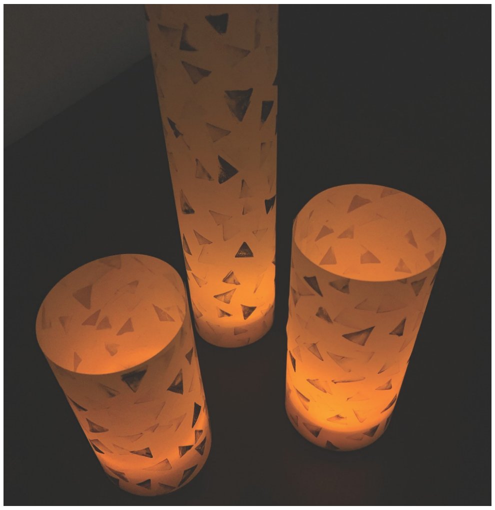


Figure 4.49 *Traditional votive lights give off a warm yellow glow in contrast to cool LEDs.*

Layering with Found Objects

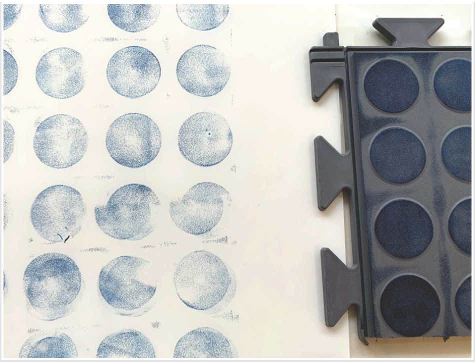


Figure 4.51 *Look for found objects to make quick patterns. This leftover floor tiling makes it easy to print one. The circle tube design started with this tile and then was stamped with the disc.*

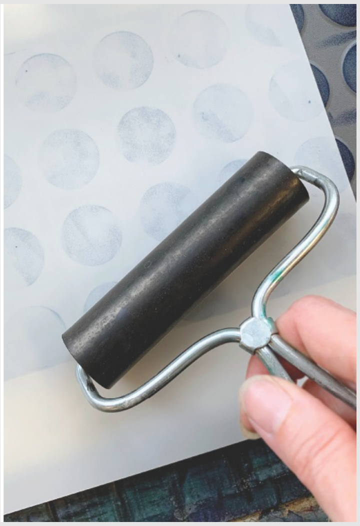


Figure 4.52 *A hard brayer is used to print the floor tile.*

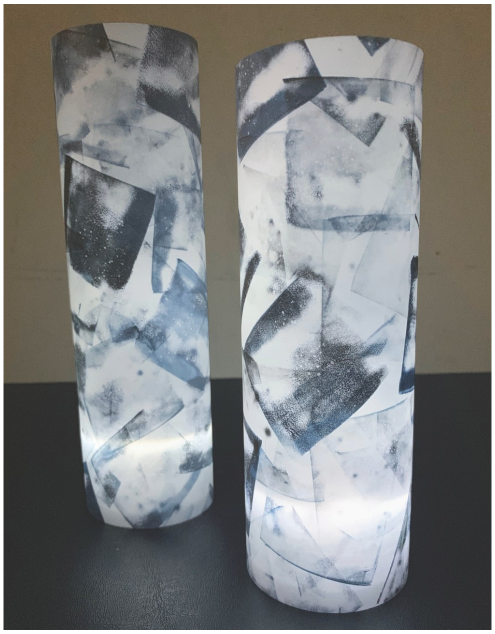


Figure 4.50 *These cylinders were rolled with the printing on the inside to create a softer look.*

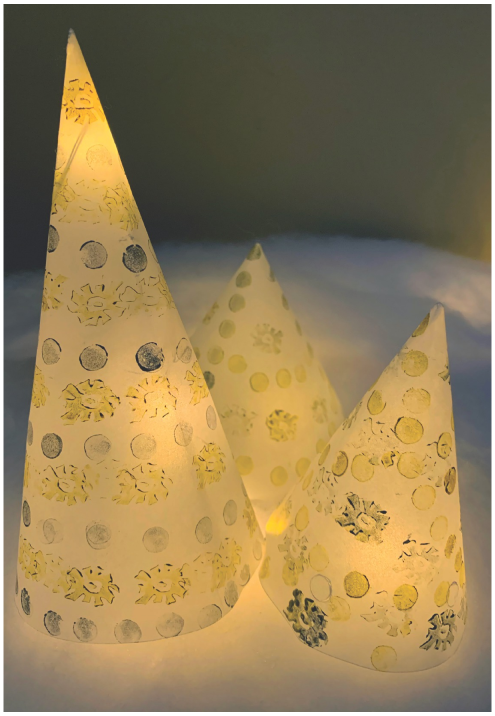


Figure 4.53 *Finished vellum tree luminaries with minilights inside*

Holiday Tree Luminaries

Create a set of holiday tree votives with vellum formed into cones and stamped with metallic gold and silver inks. The design is basic, using the end of an eraser to create a dotted garland and a small carved stamp for a contrasting ornament shape. Instead of tea lights, use a string of minilights inside the cones and place on top of artificial snow for a soft glowing effect. Snake the extra lights under the snow.

Other options include printing in red and green, stamping stars, attaching a tree topper, using a garland base, or making them larger.

Step 1 Make different-size cones by cutting out a half-circle, a quarter-circle, and a size in between. For accurate circles, the easiest method is to find a lid, bowl, or anything that is a perfect circle, and trace it on a letter-size piece of vellum. If you have a compass, that works even better.

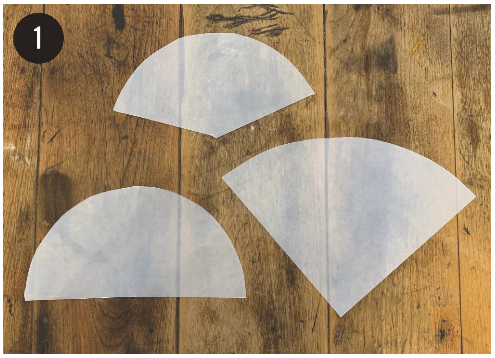


Figure 4.54 *(1) Cone shapes cut from vellum*

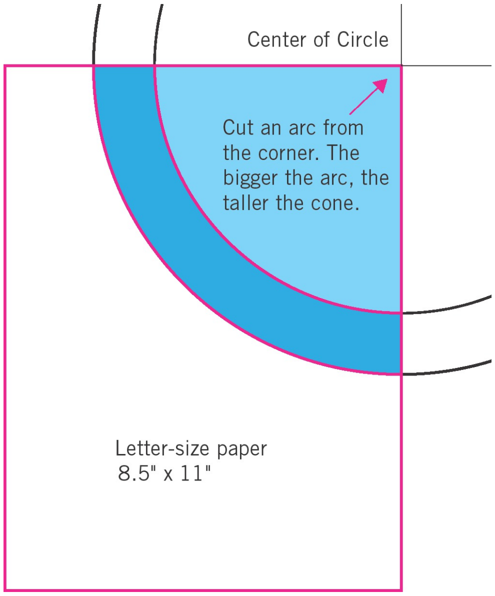

Center of Circle
Cut an arc from the corner. The bigger the arc, the taller the cone.
Letter-size paper
8.5" x 11"

Figure 4.55 *Template for quarter-size circle cone*

Generally, two cones can be cut out of one sheet of paper. If you try to get three, the trees will be fairly small. Refer to the templates in Figures 4.55 and 4.56 for placement.

To make a quarter-circle, line up the center of the circle to the corner of the paper and then only the arc has to be cut. (Figure 4.55) Use the rest of the paper for another cone.

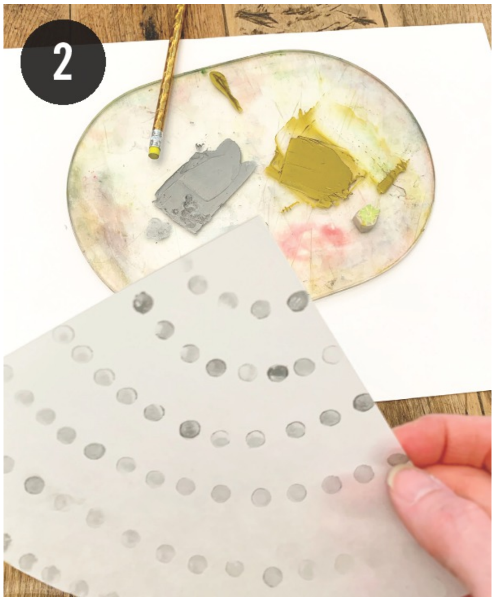


Figure 4.57 *(2) Silver is stamped using an eraser on the end of a pencil.*

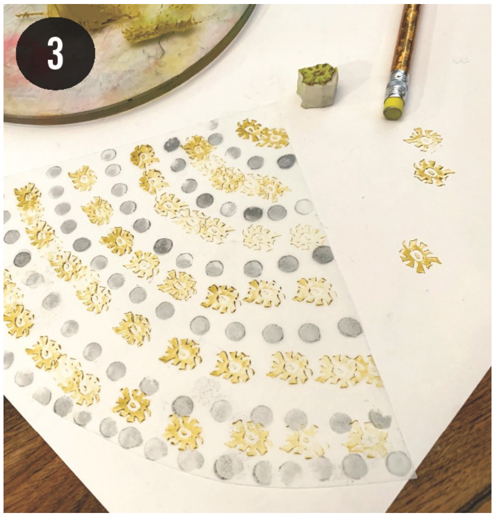
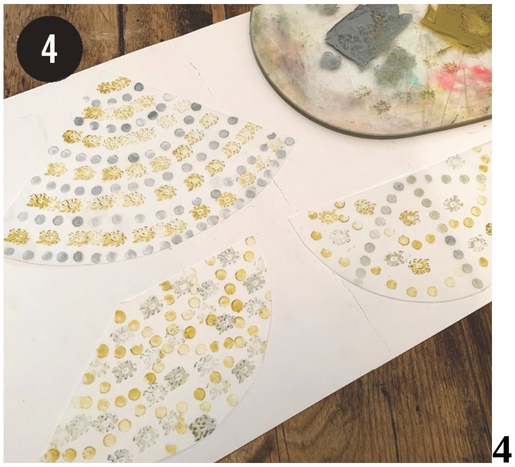


Figure 4.58 *(3) Contrasting gold is stamped using a hand-carved eraser stamp.*



4

Figure 4.59 *(4) All three shapes printed with different patterns*

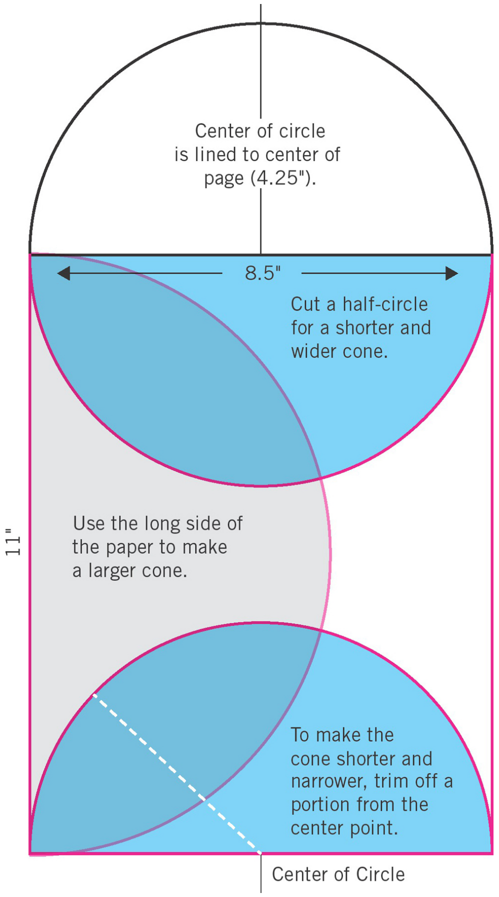

Center of circle
is lined to center of
page (4.25").
8.5"
Cut a half-circle
for a shorter and
wider cone.
11"
Use the long side of
the paper to make
a larger cone.
To make the
cone shorter and
narrower, trim off a
portion from the
center point.
Center of Circle

Figure 4.56 *Template for half-circle and smaller cones*

To make a half-circle, draw the circle from corner to corner on one side of the paper, using a template, lid, or compass. (Figure 4.56) To create a shorter and narrower cone, take the half-circle and trim off a pie slice from the center of the circle out. (bottom of Figure 4.56)

You now should have three shapes similar to those in Figure 4.54 to form the cones. Bring the sides together to test that they form proper cones or if they need adjusting. The bottoms may not line up if sides are uneven or the cone is not formed from the center point.

Step 2 Stamp designs on the flat vellum shapes. In this example, Speedball metallic inks were used. (Figures 4.57–4.59) Note: Charbonnel Aqua Wash does not come in metallic.

Step 3 Form cones after drying. Speedball ink dries quickly, so you will be able to make the cones shortly after printing. Use transparent tape to connect sides together. Attach a piece of tape on the entire length of one edge from the inside, pull the other side over, line up, and press. You might need to stick a pen or pencil into the tip of the cone in order to press on the tape to burnish it down.

If extra reinforcement is needed, add a small piece of tape on the bottom that goes from the outside to the inside.

Step 4 Display the cones with the seams to the back and add lights.

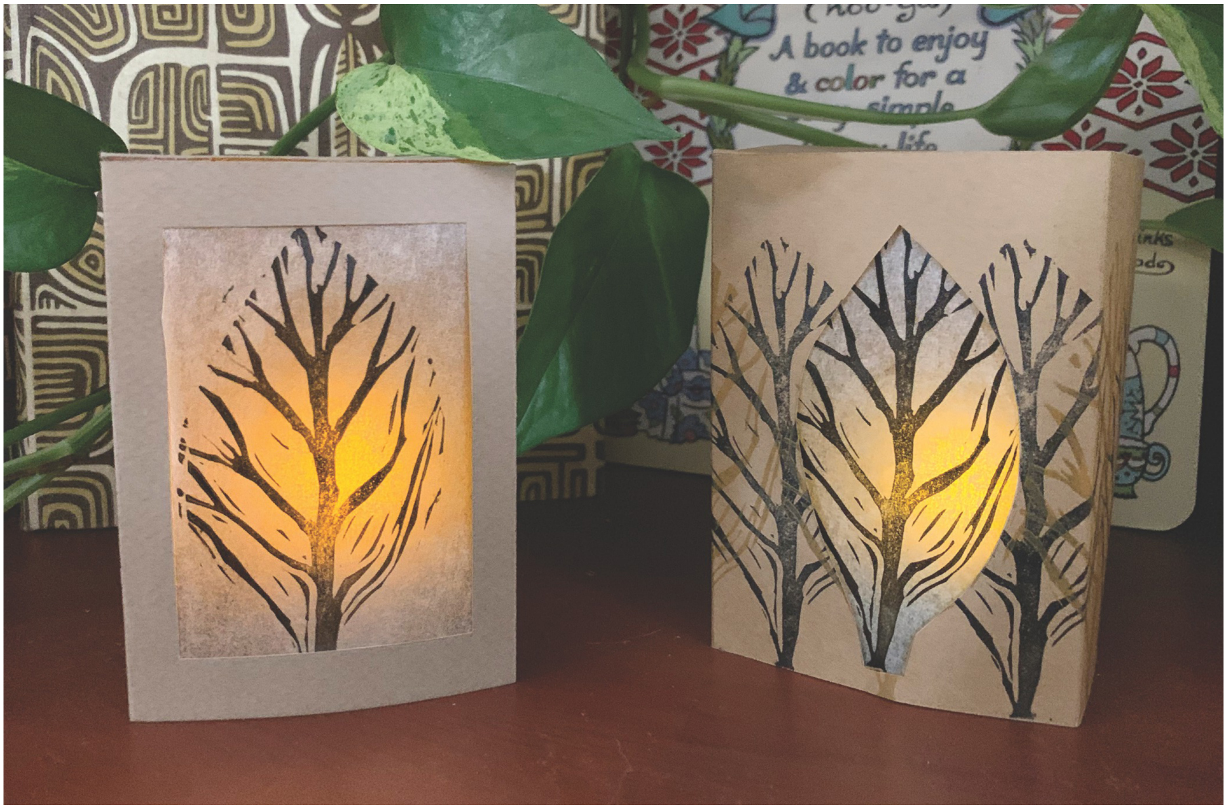


Figure 4.60 *Box luminaries with printed tracing paper windows*

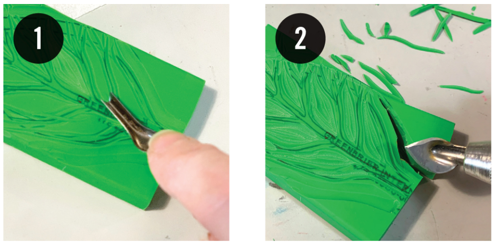
Leaf Window Luminaries

These leaf window luminaries are simple box structures with cutouts that are lined with printed tracing paper. Using the templates provided, you can build two different designs with the same steps. Of course, you can always alter the design to your taste.

Step 1 Use a template to plan your lantern design. Two templates are included for boxes with lids. There are no bottoms because the boxes sit on top of tea lights. If you do not want a lid, cut off that panel. Or you may want only one window or multiple openings. The templates are based on letter-size paper, so you scale them up or down as needed.

First, build a mock-up of your luminary box to make sure it is the right size, the folds meet, where to cut for windows, and where your printed design will go.

Step 2 Select or carve a leaf stamp design. (Figure 4.61) This design works as a leaf and as a tree.



Figures 4.61 *(1)* **& 4.62** *(2) Leaf design is carved out of plastic eraser. The outside nonprinting areas are cut away.*

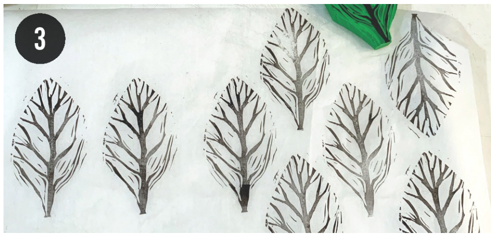


Figure 4.63 *The leaf is stamped on tracing paper for the window to allow light to shine through.*

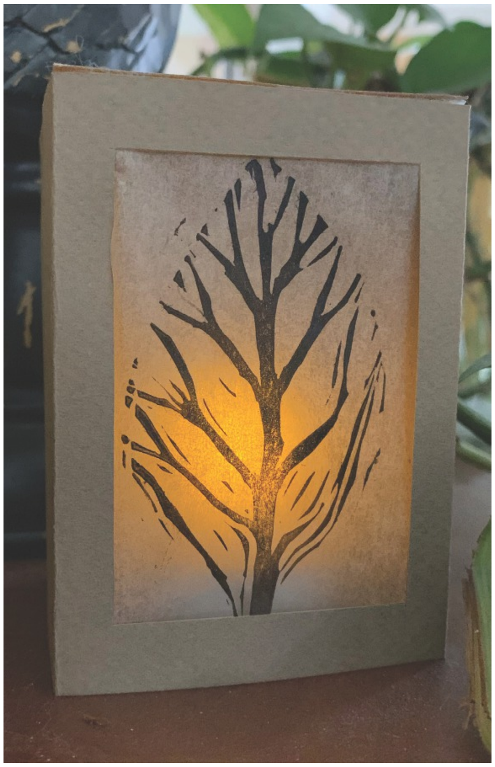


Figure 4.64 *Box luminary with simple window cutout*

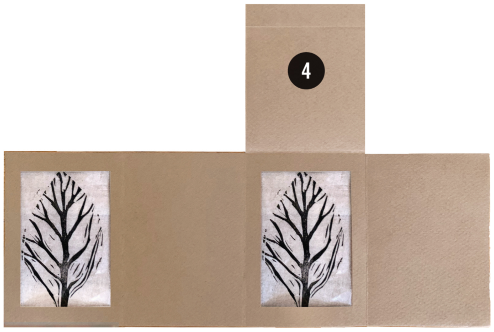


Figure 4.65 *(4) Box layout with* **4** *two windows, front and back. Use one window if viewed only from one angle.*

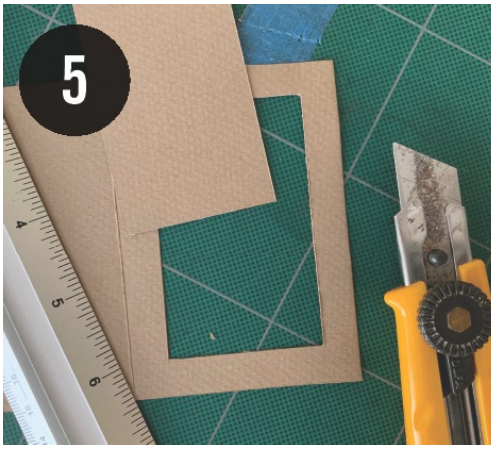
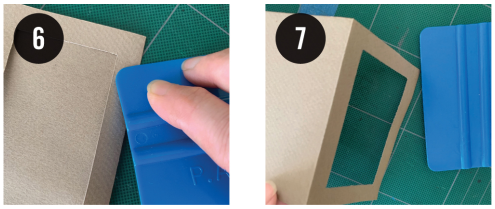


Figure 4.66 *(5) Cut out windows.*



Figures 4.67 *(6)* **& 4.68** *(7) Use a burnishing tool to make folds from scored lines to form box.*

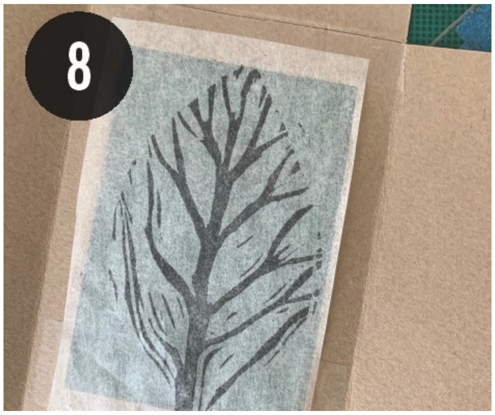


Figure 4.69 *(8) Tape tracing paper to inside of window.*

Step 3 Stamp multiple leaves on tracing paper, so you have enough for window cutouts. (Figure 4.63) When dry, cut out a leaf, allowing enough margin around it to tape to the inside of the box window. **Step 4 Cut out your template**, score the folds, and cut out window openings. Using a burnisher, run along the scored lines to create crisp folds that form the box. (Figures 4.66–4.68)

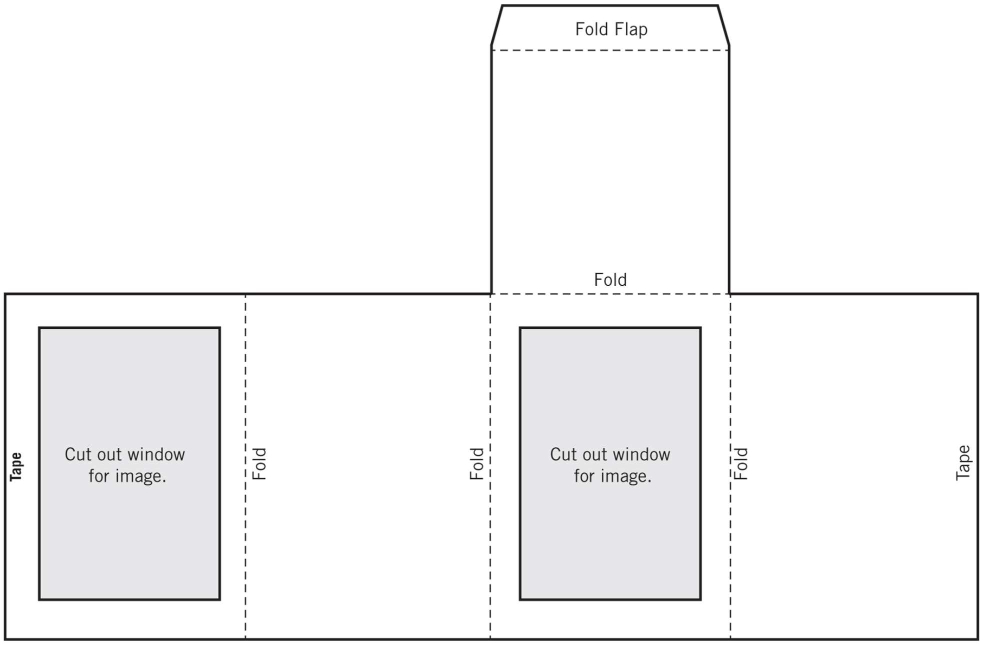

Fold Flap
Fold
Tape
Cut out window for image.
Fold
Fold
Cut out window for image.
Fold
Tape

Figure 4.70

Template for Figure 4.68. The width is eleven inches, and the template is cut from a single sheet of letter-size paper (8.5 " x 11 ").

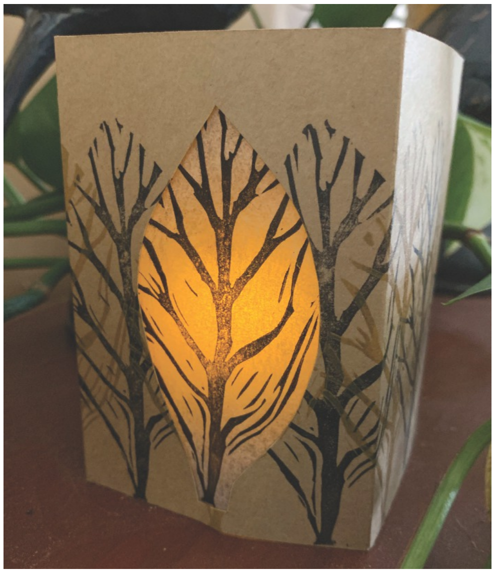


Figure 4.71 *Box luminary with leaf-shape cutout*

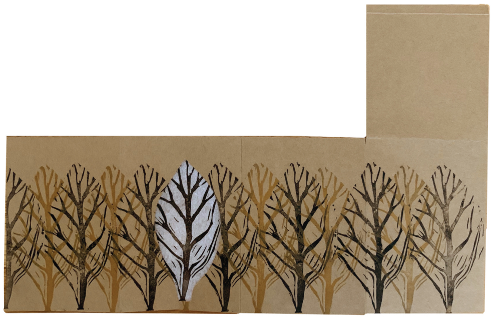


Figure 4.72 *Box layout with a single window cut in the shape of a leaf. Pick a leaf to cut out that lines up centered to the panel.*

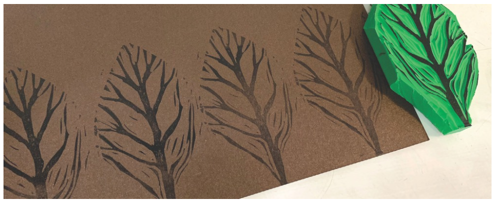


Figure 4.73 *Printing the first color for the design. It would be a good idea to cut out the main shape to plan for which leaf will get cut out for the window.*

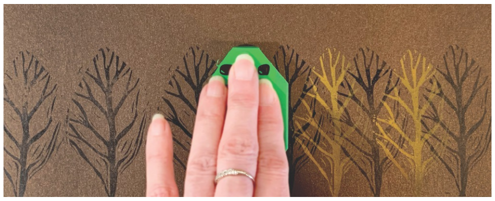


Figure 4.74 *Second color stamped over first and offset to create pattern. Different papers were printed at the same time so as to have extra prints if needed.*

Step 5 Tape or glue the printed tracing paper leaf to the inside of the box. (Figure 4.69)

Step 6 Use transparent tape to attach the sides of the box together. Tape the lid shut.

Step 7 Add lights, and enjoy!

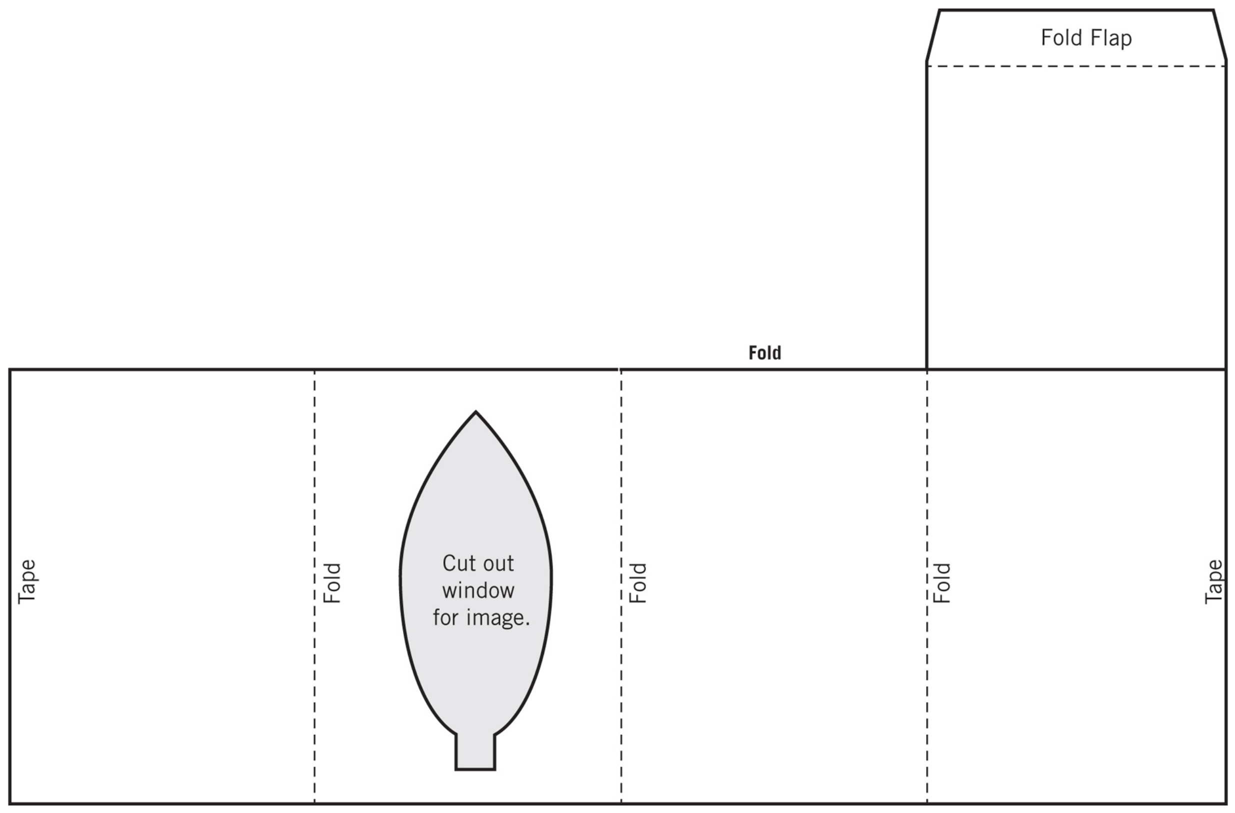

Fold Flap
Fold
Tape
Fold
Cut out
window
for image.
Fold
Fold
Tape

Figure 4.75 *Template for Figure 4.71. The leaf cutout can fall on any panel.*

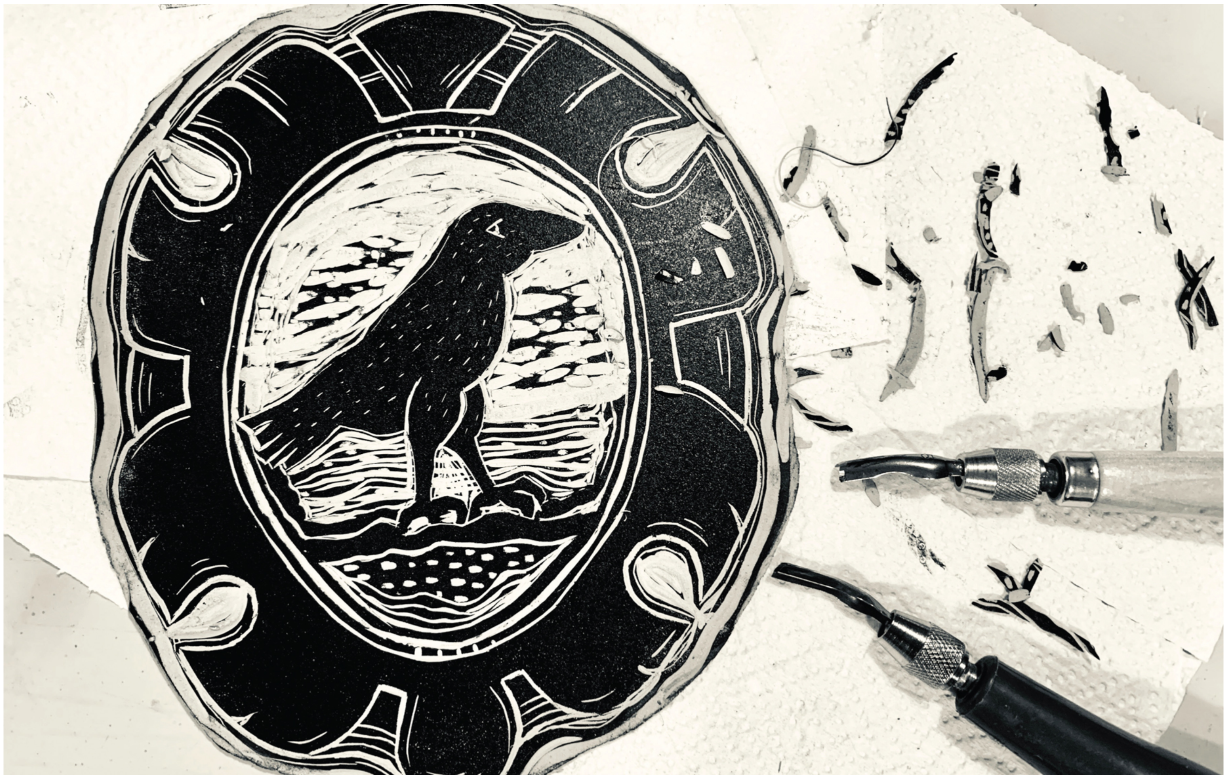


Figure 4.76 *Carved battleship gray linoleum plate inked with black and printed on a bronze-gold background*

PROJECT 8

Create Multicolor Fine Art Prints Using Traditional and Alternative Blocks

We will now venture into fine art printmaking by exploring traditional block printing with battleship gray linoleum. We will explore alternative materials that are easier to carve, such as blue synthesis plates, Sintra signage board, and craft foam sheets.

You will learn how to use multiple colors on the same print and how to register colors and explore printing on a large scale.

Traditional Linoleum Print

The process for block printing, regardless of plate material, shares many common steps, which are highlighted in this project. Traditional battleship gray linoleum, by nature of the material, requires more time and energy to carve. Refer to chapter 2 to review how to trace an image to the plate, select linocut tools, carve, and handprint with a baren.

Supplies

☐ BRelief plates: battleship gray linoleum, Sintra board, synthesis plates, or easy-cut blocks
☐ BLinocutters and blades
Ballpoint pen
☐ BTracing paper
☐ BCarbon paper or soft pencil for image transfers
☐ BSmooth printing paper
☐ BRelief ink
☐ BBaren/burnisher

This particular image is printed in black on top of a gold ink background to mimic the aged bronze in the photo. As you carve, remember what is left on the plate prints in black. Mark with an *X* what to cut away to avoid mistakes. (Figure 4.79)

The outside of the plate is cut away to create an oval shape (Figure 4.81), which will make this easy to register with a second plate for the gold ink.

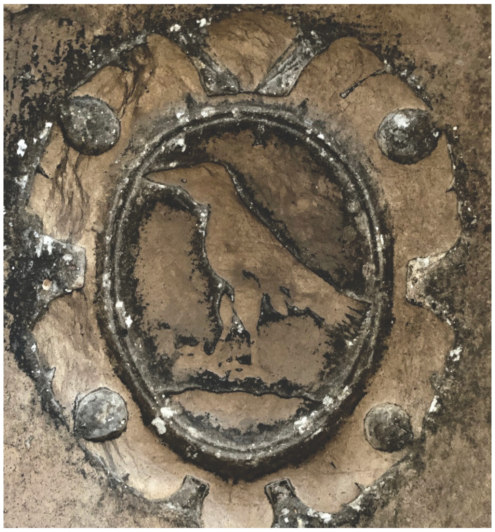


Figure 4.77 *Personal photo used as reference for the print*

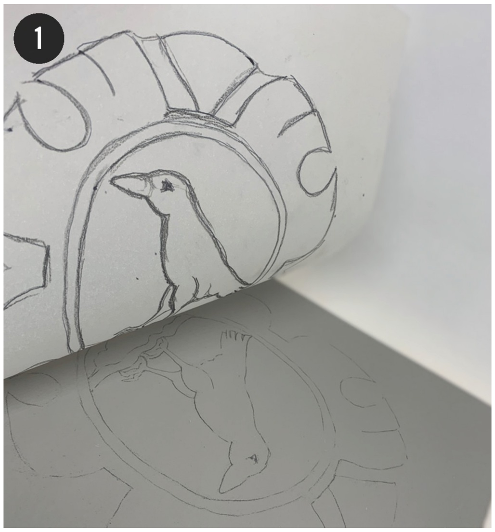


Figure 4.78 *(1) Image is transferred to plate using tracing paper.*

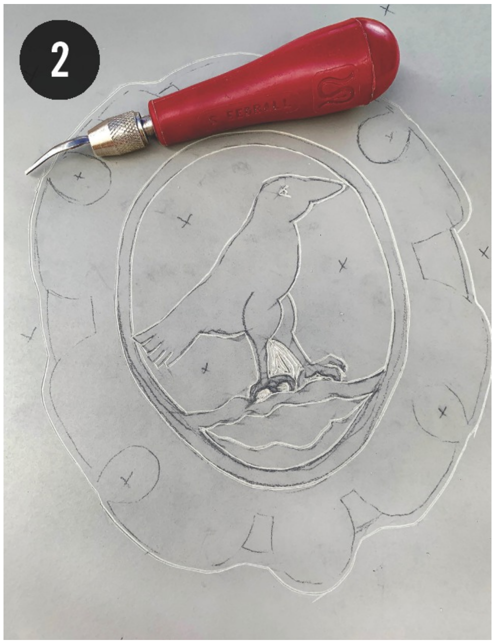


Figure 4.79 *(2) X marks the spot for areas to be cut out. The smallest blade is used to outline the key parts of the drawing.*

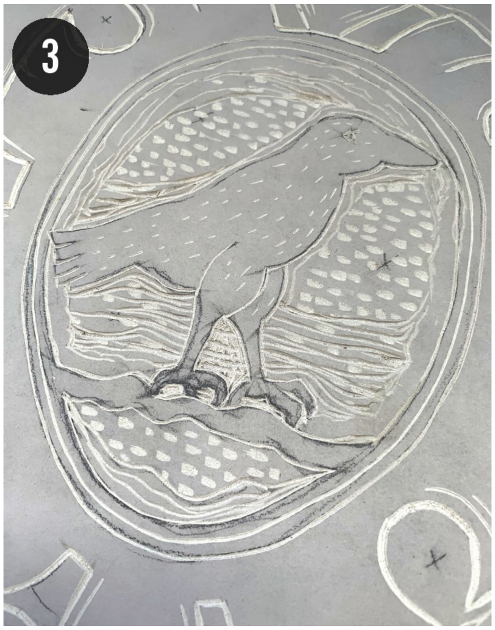


Figure 4.80 *(3) To create texture and value in the drawing, small dots were cut in different areas.*

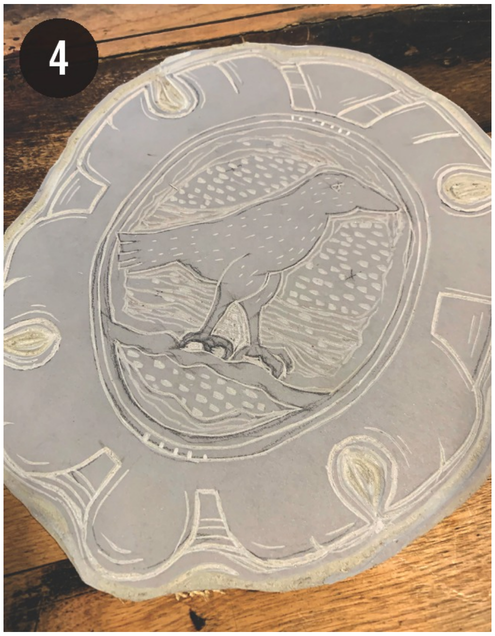


Figure 4.81 *(4) Because the plate is unmounted, it is possible to cut away the outside using scissors and a utility knife.*

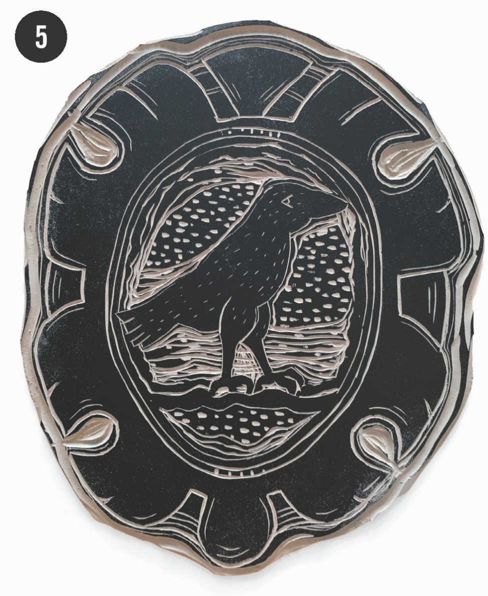


Figure 4.82 *(5) The first inking of the plate instantly reveals the balance of light and dark, and it is easy to see what needs revising. Even though it will be messy, it is much easier to make design adjustments now. A best practice is to take a proof, revise, take another proof, revise, etc., until you are happy with the proof state.*

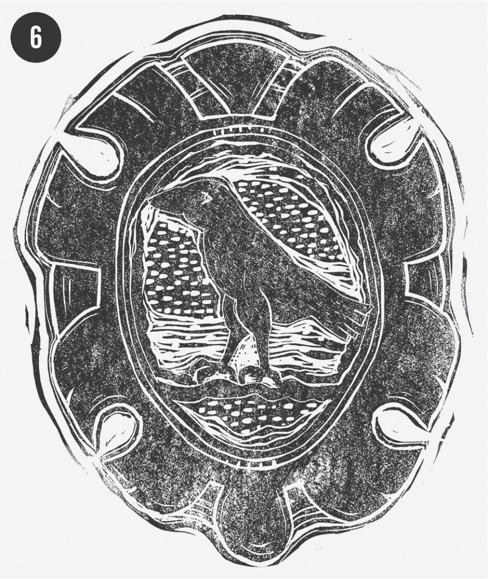


Figure 4.83 *(6) Proof taken from the first state of the plate. This does not have to be a good print; just enough to show what needs to be revised. Note the outside edges are printing, so the border will need to be cleaned up. More importantly, the image is too dark overall and the crow gets lost. To make it pop, the background needs to be white, so most of the texture needs to be cut away.*

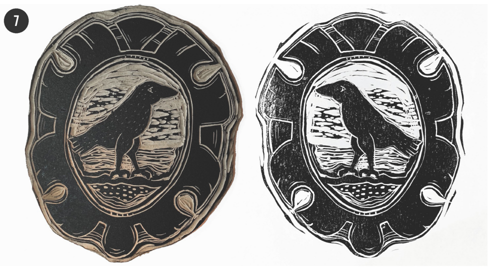


Figure 4.84 *(7) Plate and proof state after a few revisions. The last step is to clean up the edges before printing the final. Note how clearly the crow now stands out from the background.*

Setting Up Registration and First Color

An easy way to register two plates together is to have a template and paper that is cut exactly to the size of the template. (Figure 4.85)

The second plate is traced on to and cut out of craft foam. (Figure 4.86) It will serve as a simple textured oval background on which the crow plate will be printed in black.

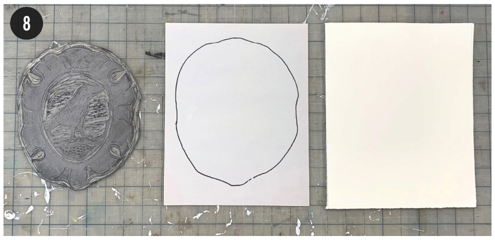


Figure 4.85 *(8) The plate was traced with a marker on to a sheet of newsprint (center) to serve as a template. The printing paper is cut to the exact size of the template. This ensures that during the printing process, the plate is placed in the same position on the paper for each impression.*

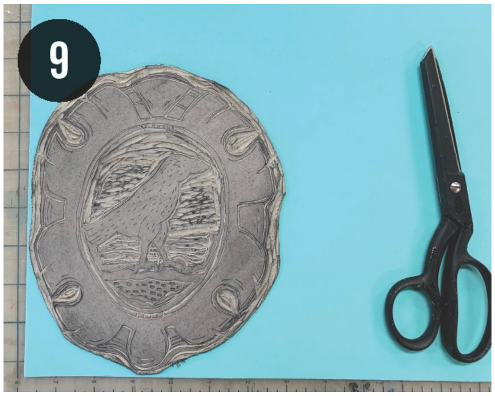


Figure 4.86 *(9) The plate is then traced on to the craft foam for the gold background.*

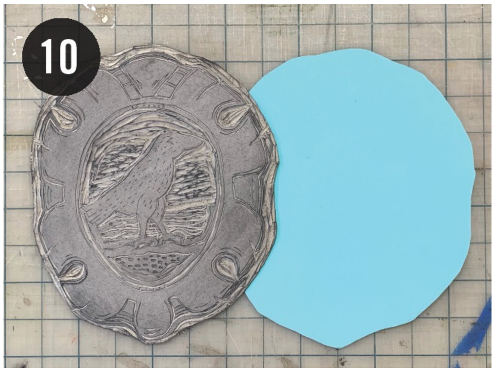


Figure 4.87 *(10) Craft foam is easily cut with scissors.*

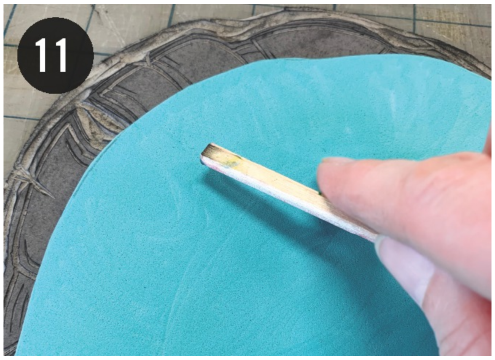


Figure 4.88 *(11) A chopstick is used to draw rough lines and textures on the foam to enhance the image, so it does not print solid and allows the white of the paper to show through as highlights. Be careful handling the foam because it easily picks up fingernail impressions.*

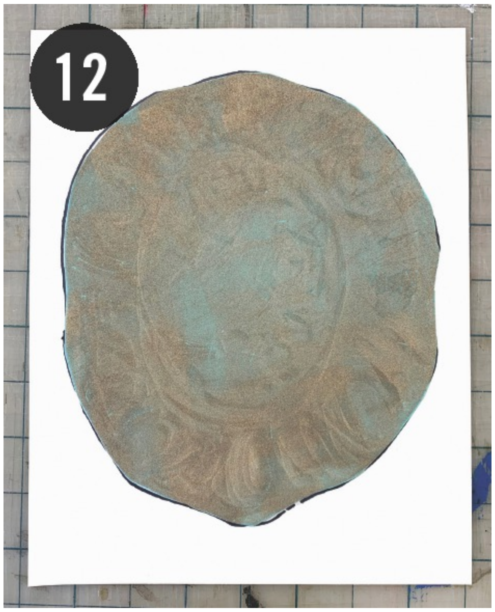


Figure 4.89 *(12) The foam plate is inked with Speedball metallic gold.*

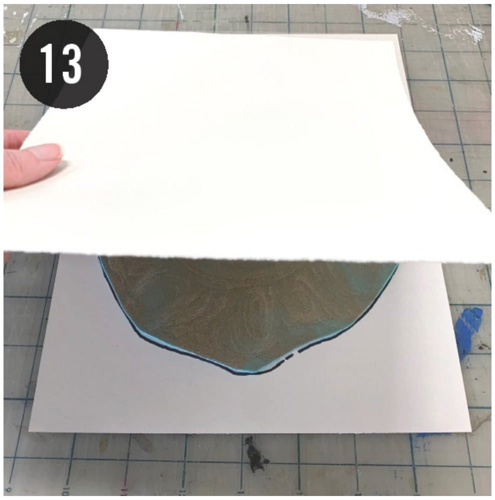


Figure 4.90 *(13) The plate is placed on the template, and the paper is lined up to the edges of the template.*

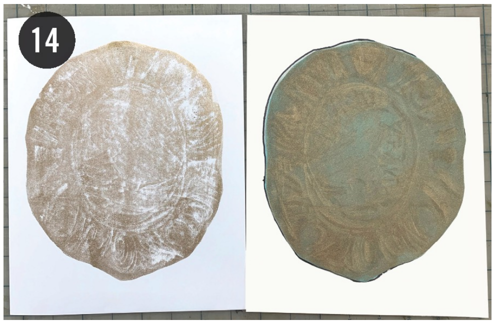


Figure 4.91 *(14) The first color is printed (shown next to the foam plate on the template). Craft foam is very easy to print, so simply running your hands on the back of the paper will yield a good print.*

Registering Black on Gold

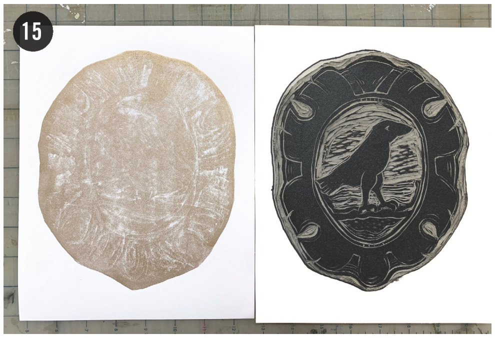


Figure 4.92 *(15) The inked black plate is placed on the template.*

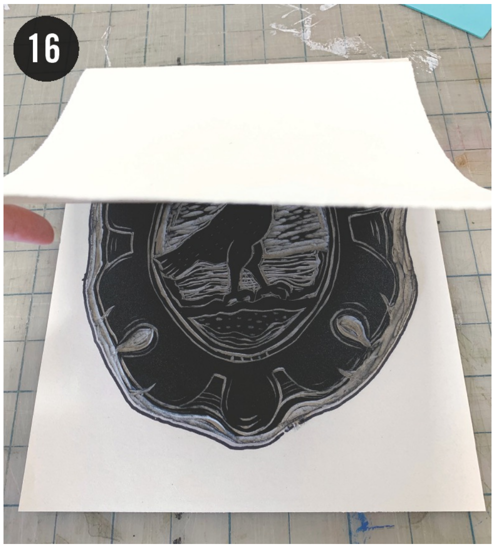


Figure 4.93 *(16) The gold print is registered to the black plate simply by lining up the paper edge to edge with the template. The plate is then printed.*

Because the two plates are placed in the same position on the template and the paper is exactly the same size as the template, registration is easily achieved.

Printing Tip

When handprinting linoleum, use plenty of ink on the plate for a more solid print.

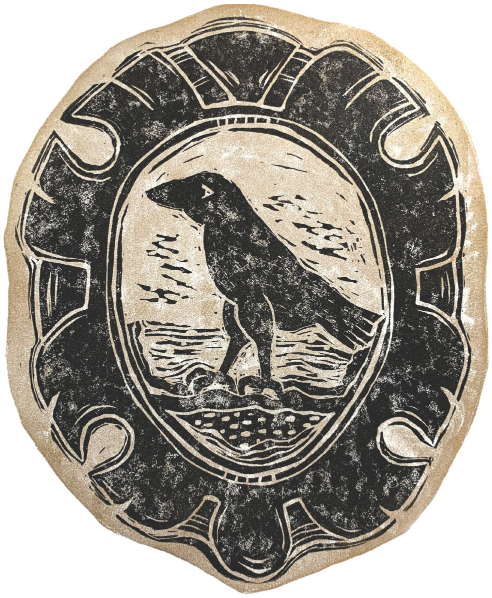


Figure 4.94 *Final two-color relief print using the linoleum plate for black and a craft foam sheet for gold*

Figures 4.95 & 4.96 *(left to right) Blank synthesis plate used for cat drawing; Inking of cat plate*

Alternative Materials: Synthesis Plate and Sintra Board

New plate materials have made it easier and faster to carve images, along with providing the ability to draw directly into them. A ballpoint pen or an etching tool used as a drawing tool leaves crisp lines when pressed into the plate. (Figure 4.97) These plates can be used for relief and etching and are able to hold great detail. It is much easier than carving!

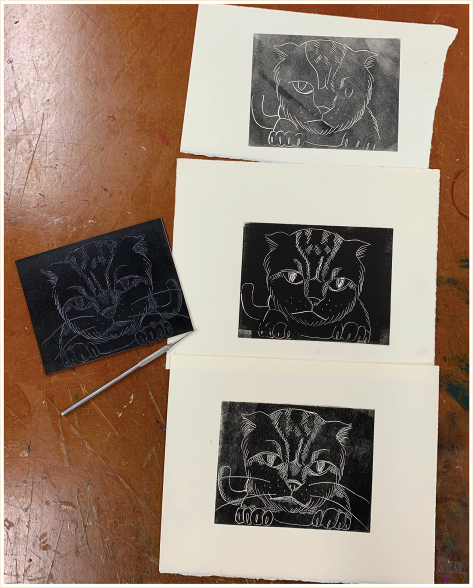


Figure 4.97 *Sequence of artist proofs of a cat drawn on a synthesis plate with a sharp etching tool. (Art by Sultan Tamboosi)*

Blue synthesis plates and the white Sintra board are both composite plastic boards that are similar to a dense foam board but have harder surfaces. Sintra is a PVC board and is much more durable and rigid than the synthesis plate. They both hold up well for hand-printing and on a printing press.

The following relief print project uses the synthesis plate but also could be completed with Sintra board or easy-cut blocks.

Sintra board is available from a variety of online sources. **Synthesis plates** are sold by Graphic Chemical & Ink Co.

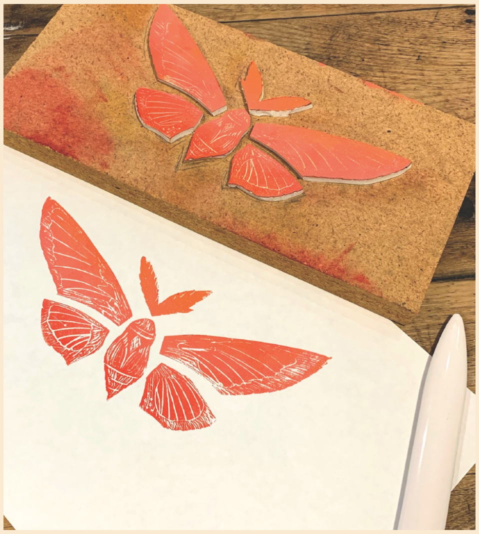


Figure 4.98 *Sintra board cut up with a utility knife into parts of a moth and then taped to a board to hold in place while printing. The white lines were drawn with a ballpoint pen. Hand-printed using a burnisher.*

Large-Scale Printing

Large-scale printing can yield exciting results. Cutting shapes out of synthetic boards is easy and allows for a wide range of approaches, with flexibility in positioning and arrangement. In the following example, the flower and stem are used to create a 25" x 37" print and as part of a wall mural shown on page 104. (Figures 4.112–4.116)

The flower and stem design were cut into the blue synthesis plate with linocut tools and a ballpoint pen. A utility knife was used to cut away the background to leave the shaped plates. Colors were brayer-painted on to achieve blended effects, and plates were organically printed. In other words, it was not planned but each impression suggested where the next print should connect.

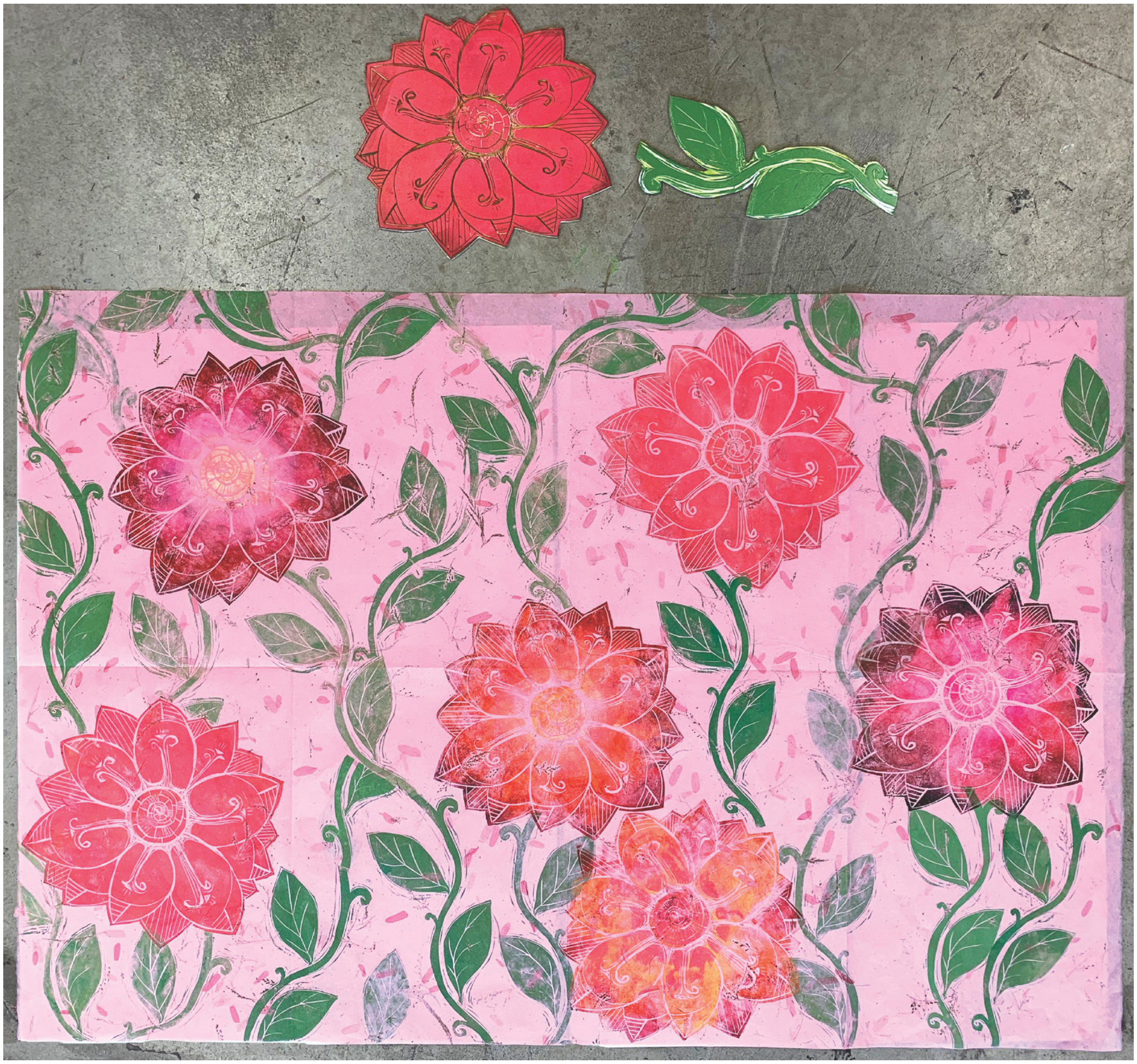


Figure 4.99 *The synthesis plate was carved with linocut tools and a ballpoint pen. The plates were trimmed to eliminate background printing and to allow for easy alignment.*

The paper is Thai Tamarind Pink, 25 " x 37 ", which is tissue-weight made with mulberry and bamboo fibers and is scattered with leaves from the tamarind tree. It is perfect for hand printing relief plates and for decoupage applications.

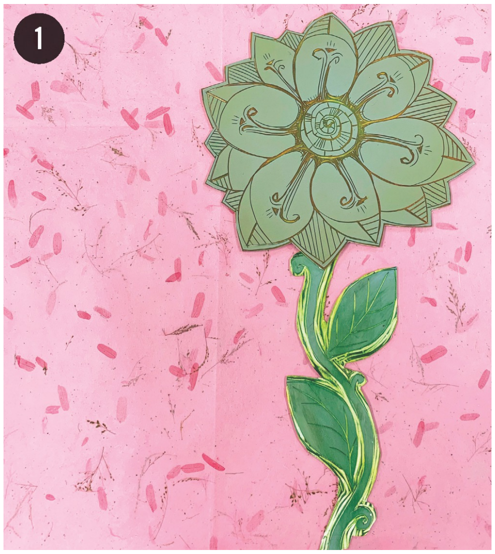
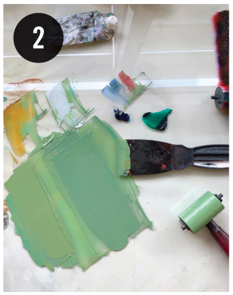
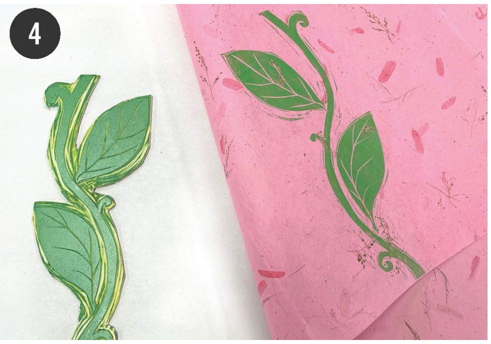


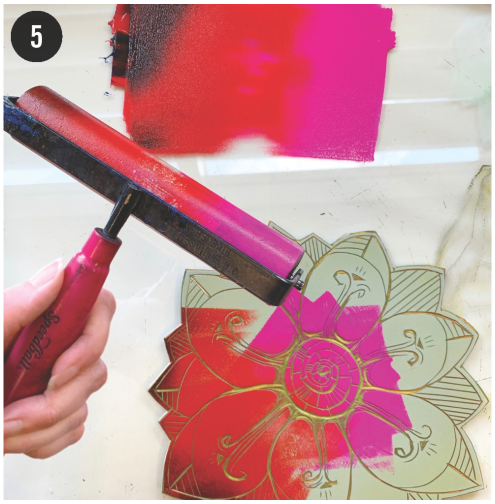
Figure 4.100 *(1) Plates are positioned to plan for the first print.*



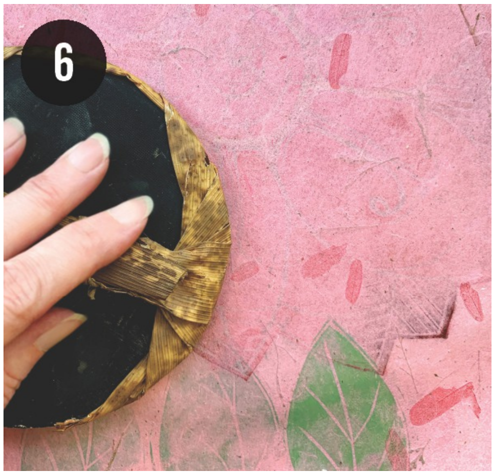
Figures 4.101 *(2)* **& 4.102** *(3) Mix green, and test on a small piece of paper to check color.*



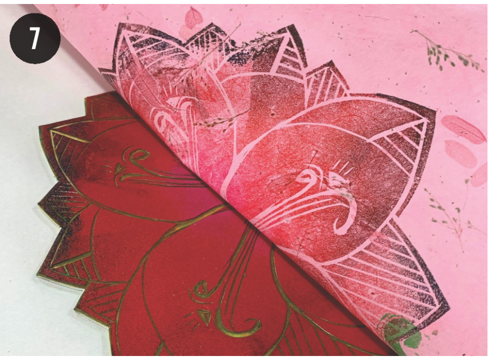
Figures 4.103 *(4) A small burnisher and hands were used to make the first print.*



Figures 4.104 *(5) The flower is inked up with a blend, rolling it in a circular motion. Keep the pink in the center.*



Figures 4.105 *(6) The flower plate is placed on top of the printed stem. Because the flower plate is a larger surface, a baren is used to print.*



Figures 4.106 *(7) The print is partially pulled back to check ink coverage. If you are getting light prints, add heavier ink coverage to the plate before printing.*

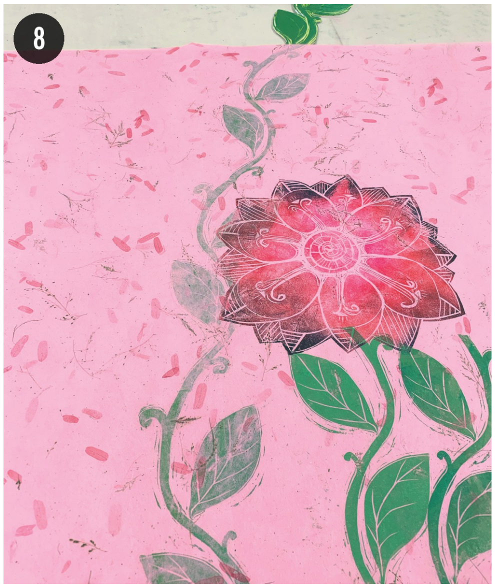
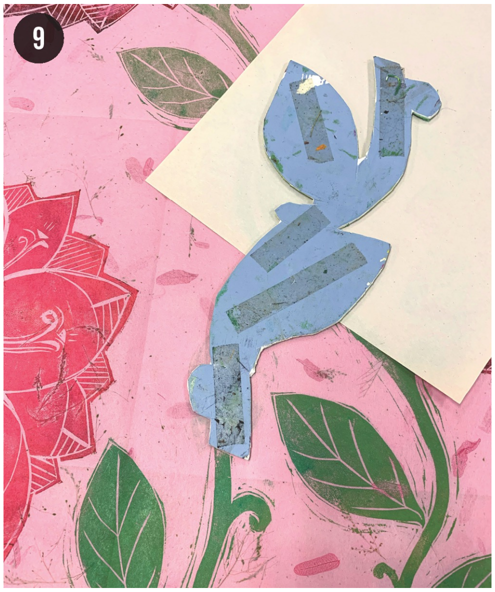


Figure 4.107 *(8) Continue to print stems by connecting to each other or to flowers. Because the paper is thin, printing on both sides allows the plates to be mirrored and appear lighter and darker, suggesting visual depth.*



Figures 4.108 *(9) Use paper as a stencil to keep stems from printing in certain areas, such as over the top of a flower.*

Cutting Tissue-Weight Papers

Paper like Thai Tamarind Pink should be torn, not cut. If you need a smaller size from a large sheet, use a brush to wet a tear line and pull apart at the seam.

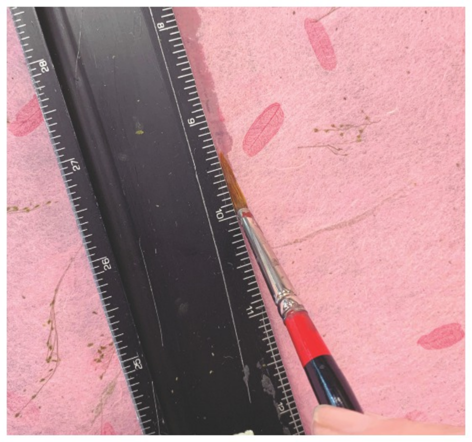


Figure 4.110 *Wet paper with soft brush and straight edge.*

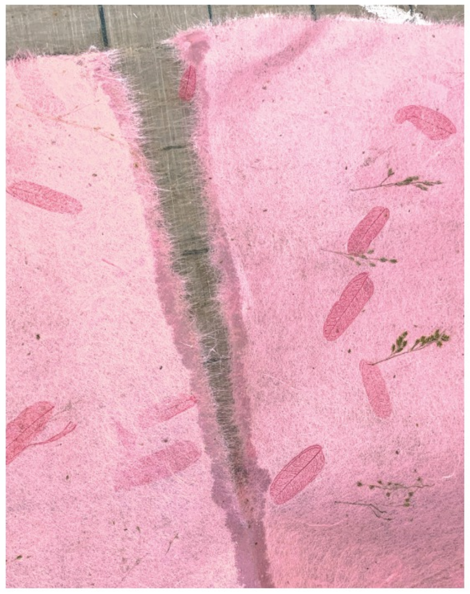


Figure 4.111 *Gently pull apart paper at wet seam to achieve a soft, feathered*

edge.

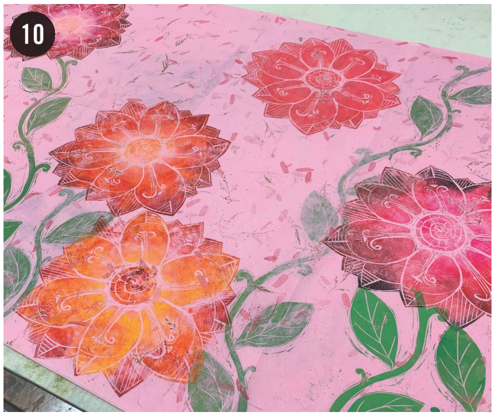


Figure 4.109 *(10) Printing progress with all flowers in place. The empty areas will be filled with stems.*

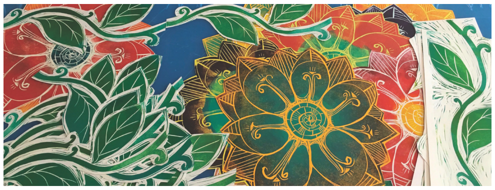
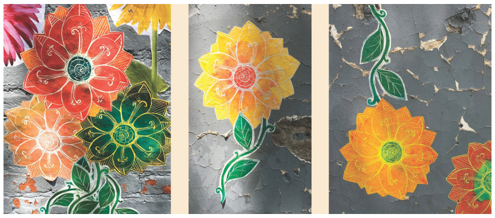


Figure 4.112 *Printed flowers and stems cut out and ready to paste*



Figures 4.113–4.115 *Different configurations pasted on a wall*

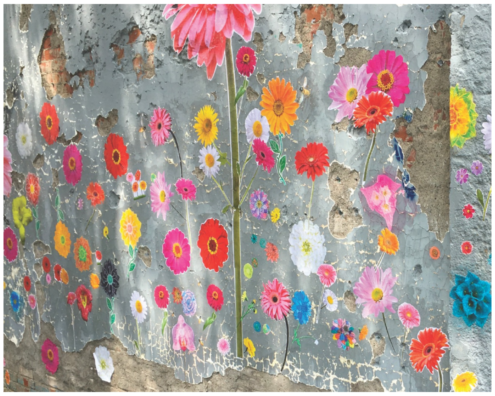
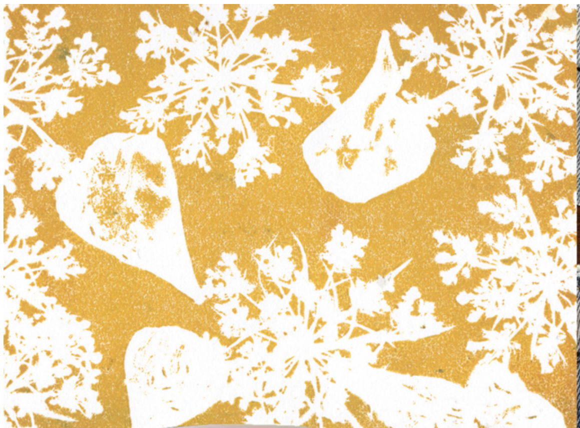


Figure 4.116 *Part of the mural wall. Project coordinated by ScrantonMade of Scranton, Pennsylvania.*

Wheat Paste Mural

This mural was a community art project that included prints made from the flower and stem plates. The prints, a temporary installation, were adhered to a wall with wheat paste.

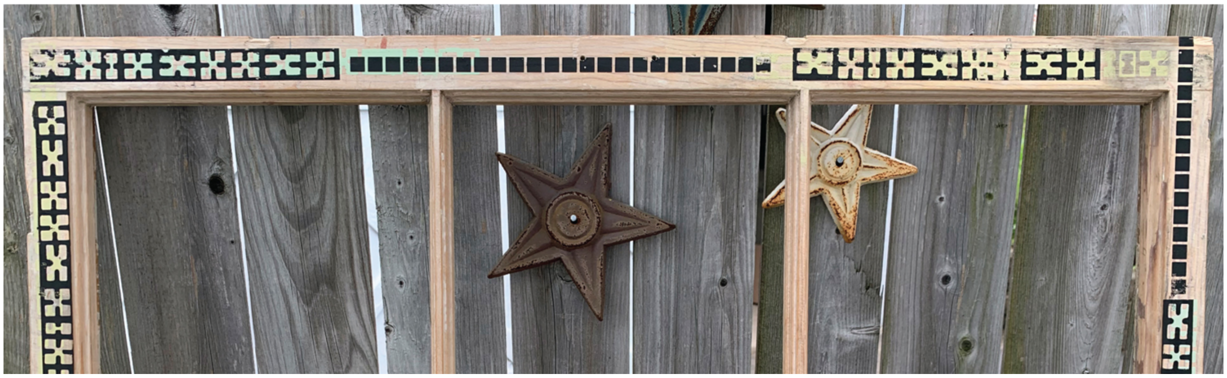


CHAPTER 5

Screen Printing and Photographic Techniques

Project 9: Screen Print on Wood Using Cut and Painted Stencils
Project 10: Print a Coffee Mug and Coaster Set
Project 11: Screen Print on Textiles and Combined Techniques
Project 12: Solarplate Relief Prints

These projects are more advanced, appealing to artists, graphic designers, crafters, and makers. Projects using photographic processes benefit from access to a computer and printer, but they can be done entirely by hand if needed.



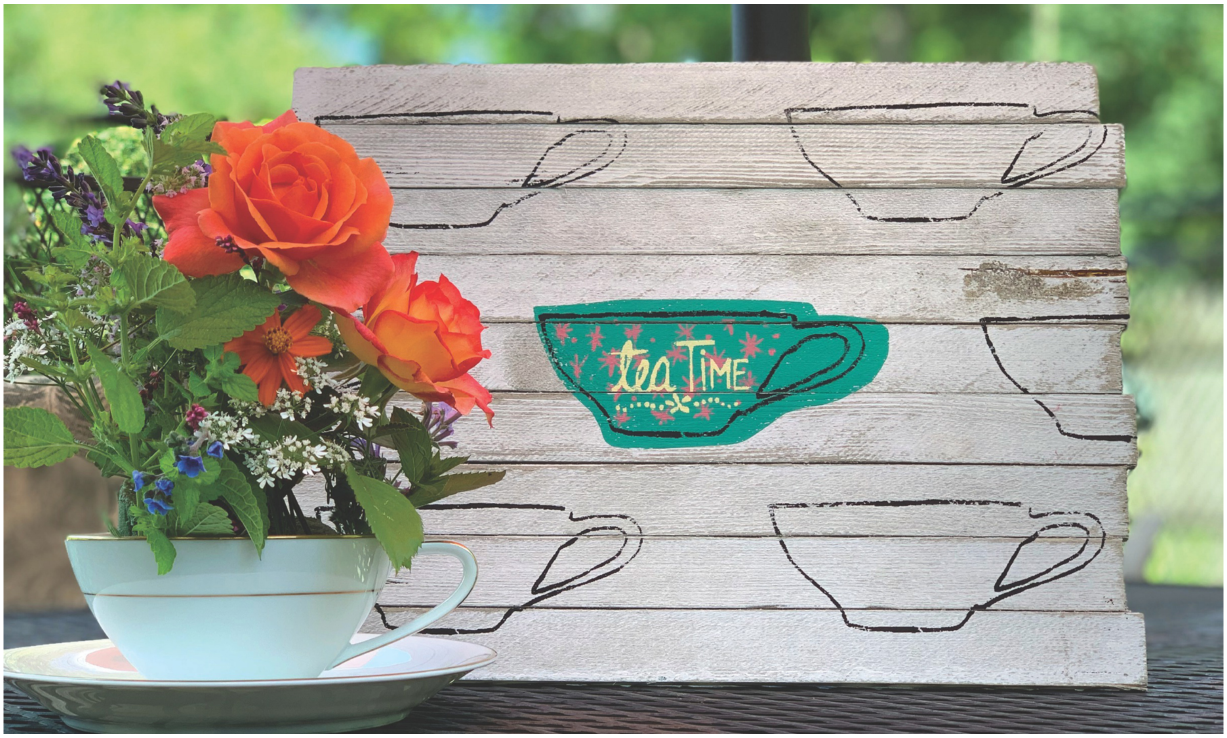


Figure 5.1 *Screen printed wood plank*

PROJECT 9

Screen Print on Wood Using Cut and Painted Stencils

This project will take you through the process of hand-cutting and painting a stencil to make a multicolor wood design to hang or use as a tray. We also will screen print on an old window frame, using cut stencils.

As you learned in chapters 1 and 2, screen printing is a stencil process, regardless if the stencil is made out of paper, photo emulsion, or masking tape. The stencil leaves an opening for the ink to pass through.

Stencils adhered to a screen result in clean-edged prints with a flat, even ink surface, rather than the more crafty approach of directly stenciling on the item with a brush. Having to attach the stencil only once is especially useful for multiple and/or small pieces and makes the process go faster.

Supplies

☐ BWood plank, box, sign, frame, pallet, crate, tray, etc.
☐ BAcrylic screen printing ink (Speedball/Blick)
☐ BSqueegee or plastic scraper
☐ BScreen printing frame
☐ BSpeedball drawing fluid and filler
☐ BClear shelf-lining paper for stencil
☐ BPainter’s tape
☐ BPaint brush

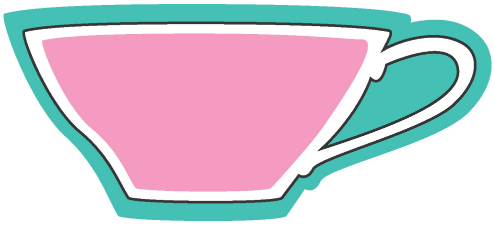


Figure 5.2
Template is actual size for the project. The black outline will be traced and painted on the screen. The teal and pink shapes will be cut out of the clear shelf-lining paper.

For this wood plank project, we will hand-cut two simple stencils out of clear shelf-lining paper to create the teal cup shape and a mask for the coral pattern design. We will also paint stencil designs on the screen to create the black outline of the cup, the pattern, and the lettering. As for any of these projects, add your own variation to fit your style. Change “tea time” to “coffee,” leave off the lettering, alter the pattern design, or pick different colors. A template is provided for the cup outline and stencils to get you started. (Figure 5.2)

Because of the multiple steps and colors, this project can be challenging. Measure twice, print once!

Making a Hand-cut Stencil

Step 1 Using the stencil template above (Figure 5.2), trace and cut the background teal cup shape from the clear shelf-liner roll. The shelf-lining paper is clear on one side, with an adhesive back cover and a blue grid paper on the front.

The adhesive back will attach to the back of the screen, which means the shape needs to be traced on to the blue grid front so that the cup prints in the correct orientation.

Use any of the transfer methods you have learned so far, such as tracing on a window, to get the cup on the paper. (Figure 5.3)

Cut out the shape with a utility knife, making sure not to cut out the hole in the handle. (Figure 5.4) The design is set up for loose registration. So if the colors are not exactly lined up, the print will still be successful, which is all part of the handmade aesthetic. Less perfection, less stress, and more charm.

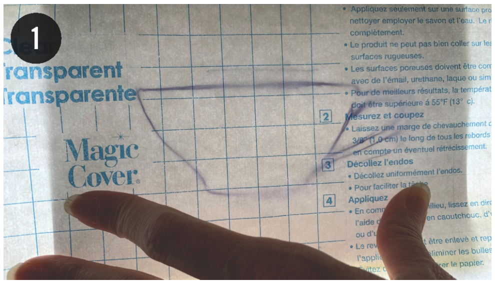


Figure 5.3 *(1) The image is traced on to the stencil. Place against a window to easily see the sketch.*

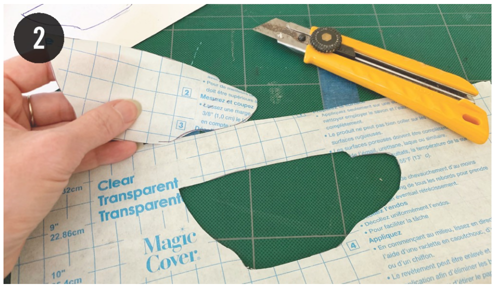


Figure 5.4 *(2) The background shape cut out from clear shelf-lining paper*

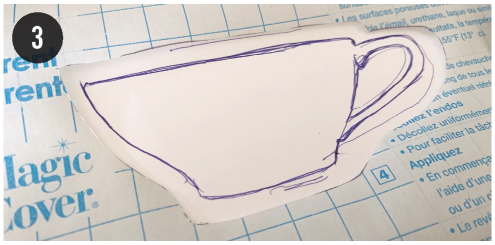


Figure 5.5 *(3) The stencil is checked against the original drawing to make sure enough space is allowed for loose registration while printing.*

Step 2 Peel away the stencil backing and attach to the back of a clean blank screen. (Figure 5.6) If placed on the front, the image will print backwards. Plus running the squeegee over the actual stencil peels it up.

On the back, block out the rest of the screen with paper and tape to make sure no ink leaks outside of the print area. (Figure 5.6)

Print the First Color: Teal

Step 3 Mix all your colors ahead of time, so they are ready to go. It is only necessary to mix small amounts because the project does not require much ink. If you plan to use the color again or print multiples, then mix more. Store in a sealed container. The ink can last up to six months before getting thick or dried out. If it is thick, it can be saved by adding a little water.

The teal is a mix of white, blue, and yellow acrylic screen printing inks. Use fabric ink in a pinch if that is all you have on hand.

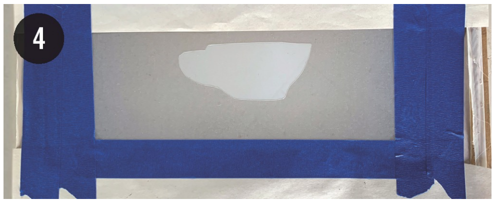


Figure 5.6 *(4) Peel away stencil backing and attach stencil to the back of the screen. Mask out the nonprinting areas of the screen with paper and tape.*

Step 4 Set up your printing template. Attach the back of the screen to hinge clamps with the back facing the plank. Align the plank to the image, and create a masking tape guide on the printing board or table-top. (Figure 5.7) Do this before the screen is inked to clearly see where the print will land. Use a ruler to center the design. You need to know exactly where the plank is aligning to the screen, especially if printing multiple colors and items in order to register the image.

Without a tape guideline, there is the risk that the plank or the table might get bumped and something moves, putting everything out of alignment. The template allows you to nudge everything back in place.

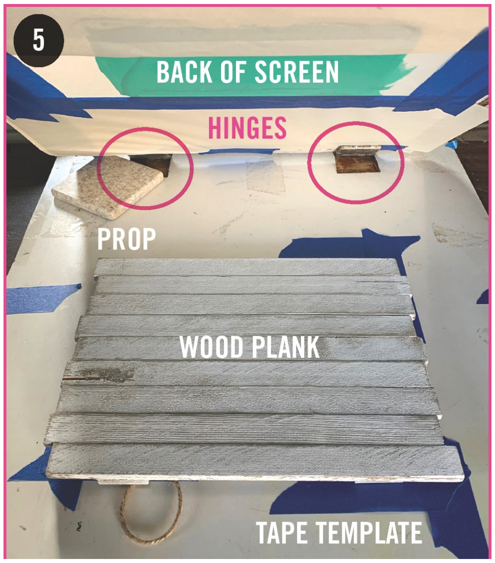


Figure 5.7 *(5) Screen is attached to hinge clamps with the back of the screen facing the plank. Plank is aligned to tape guidelines.*

A ceramic tile is slid under the screen frame to prop it up while flooding. Remove before printing.

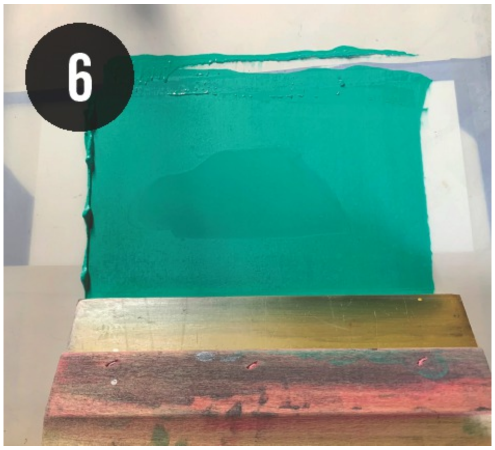


Figure 5.8 *(6) Screen is flooded before printing. Run the squeegee over twice to make sure enough ink gets on the rough surface.*

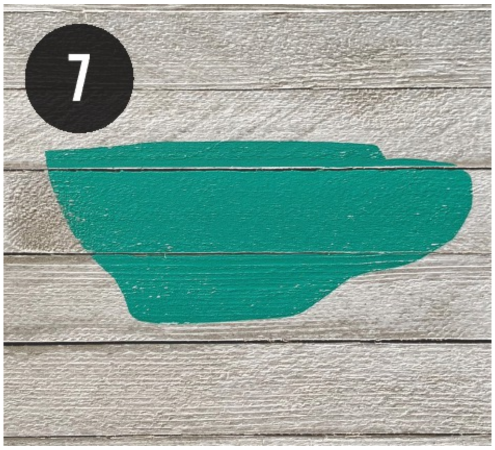


Figure 5.9 *(7) Printed plank using stencil*

Step 5 Print the teal cup. It is best to print on paper first to test your stencil and to practice printing. When you are feeling comfortable, move on to the plank.

- In order to flood, or pre-ink, the screen, it needs to be propped above the wood plank. If the screen hinges do not lock in the vertical position, use a roll of tape or slide something flat under the screen by the hinge, like the tile shown in Figure 5.7. Always remove the prop before printing.

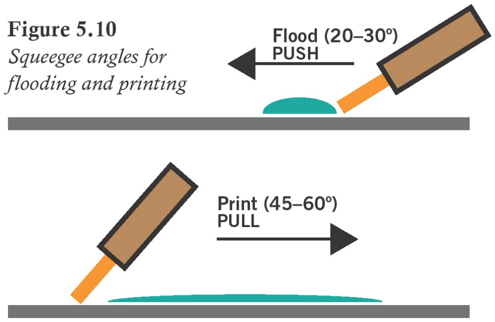


Figure 5.10 Flood (20–30º) *Squeegee angles for* **PUSH** *flooding and printing*

- Place about two tablespoons of ink along the length of the image on the side closest to you. Hold the squeegee at a slight angle (twenty to thirty degrees, as shown in Figure 5.10), and push the ink away over the stencil area to flood the screen. The ink should be evenly solid (Figure 5.8), with no areas that have a white or a salty look, resulting from too little ink.
- After flooding the screen, place the screen down flat on the wood plank in preparation for printing.
- Position the squeegee at the top of the flooded screen, making sure you are pulling the ink toward you at a forty-five- to sixty-degree angle as shown in Figure 5.10. To print, pull toward you with firm, even pressure, going just past the stencil. Pull down twice to ensure enough ink gets on the wood surface.
- Push up the screen, prop it, and inspect the printed plank. If you missed a spot and need to touch up, do it while the ink is still wet. Grab a small brush and gently spread the ink around to cover the spot, or use a very small amount of ink and paint it on. If ink printed where it should not have or the ink spread because it was too thick, wash it off immediately. Depending on the wood, it may come off easily or you might have to lightly sand it off.
- Let the plank dry for about an hour before printing the next color. Print any other items while the teal is in the screen. Make a few paper prints for testing and registering the next colors.

- When finished printing, peel off the stencil and wash out the screen. A hose with a spray nozzle or a utility sink and sponge works great. Inks may stain the screen, especially reds, so do not worry if they do not completely wash out. Try a spray cleaner to remove stains.

Step 6 Stencil Painting for the Cup, Pattern, and Type

Chapter 2 covers how to paint a stencil, fill it, and wash it out in detail. Here is a quick review and how to make the black outline, pattern, and type for the teacup.

- Place the screen over the teacup template and paint the outline with drawing fluid (Figure 5.11) on the front side. If you make a mistake, wash it out with a damp cloth and start over.
- On the same screen, paint in any patterns and type designs you would like to use, leaving a little space in between for masking. (Figure 5.12)
- Let the drawing fluid dry, and cover the screen with filler. When everything is dry, wash out with water, so the screen is ready to print. (Figure 5.13)

Note: Even though a screen is stained with old images, they will not print. An old screen was used for this portion.

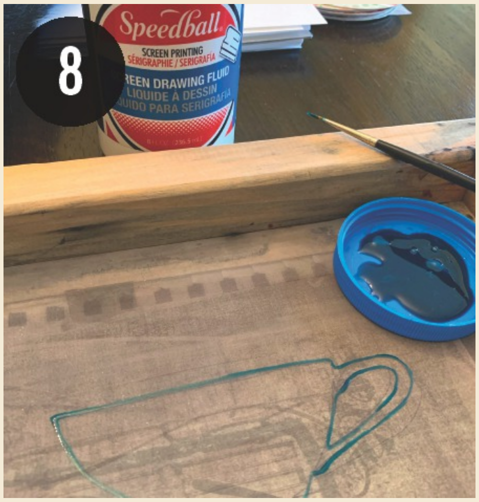


Figure 5.11 *(8) Cup painted with drawing fluid on front of the screen.*

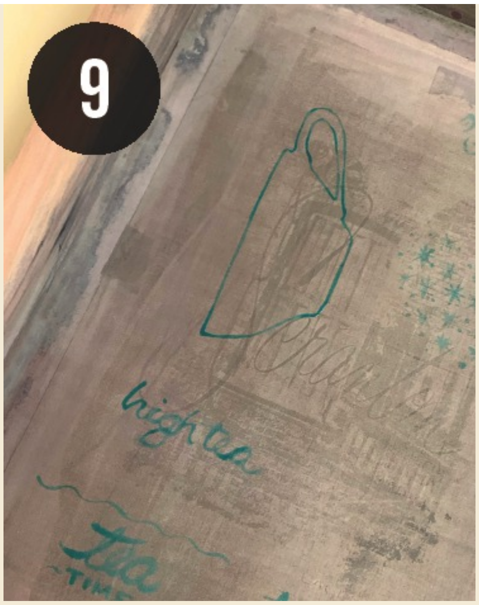

9
high tea
Tea
TIME

Figure 5.12 *(9) Patterns and lettering are added to screen.*

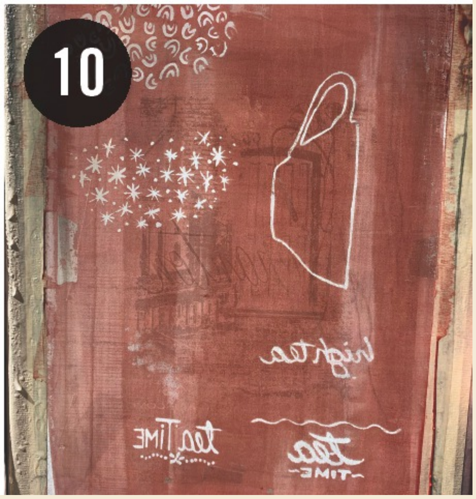


Figure 5.13 *(10) Filler is added and drawing fluid is washed out.*

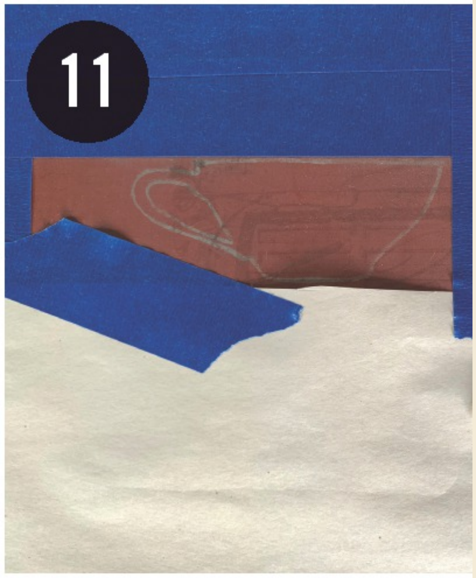


Figure 5.14 *(11) In preparation for printing the cup, the rest of the screen is masked out on the back of the*

screen.

Printing the Second Color: Black Cup

Now we will register and print the black cup outline on top of the teal shape. Then we will print rows of cups to create an allover pattern. (Figure 5.16)

Step 7 Register the plank and tea shape to the cup screen. Make template with tape. Use a ruler to double-check that the black outline will land in the right spot.

Also, mark how far up and down to go for printing the rows of cups. Use a ruler to help determine spacing and placement. Mark with tape and make notes if needed.

Step 8 Print the black. Flood the screen with black ink and print twice to get a solid saturation. You may find that a small scraper used as a squeegee works better for small areas. (Figure 5.19) Let dry before the next color.

Printing the Third Color: Coral Stars

Step 9 Cut the last mask on the shelf-lining paper from the template. (Figure 5.17) This is the teacup shape to mask the star pattern on the screen, which was painted larger than the teacup. (Figure 5.18) This shape also could be achieved with tape. Place on the back of the screen and mask out nonprinting areas with paper and tape.

Step 10 Flood the screen and print pattern on teacup. (Figure 5.19)

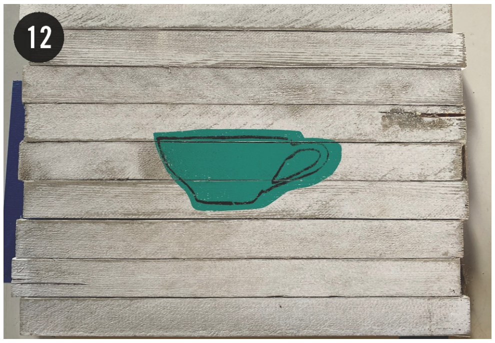


Figure 5.15 *(12) First black ink cup printed*

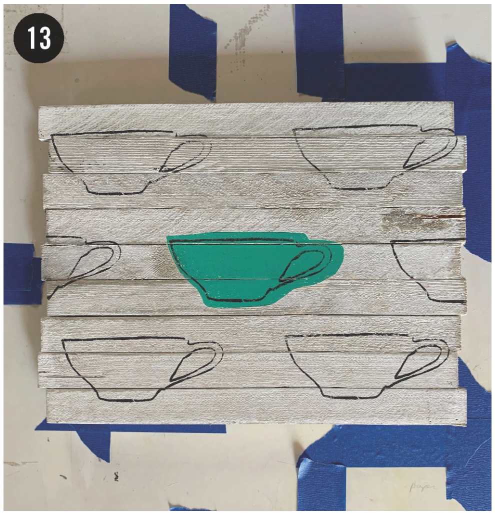


Figure 5.16 *(13) Rows of black cups printed. Masking tape template and notes help guide how to line up plank.*

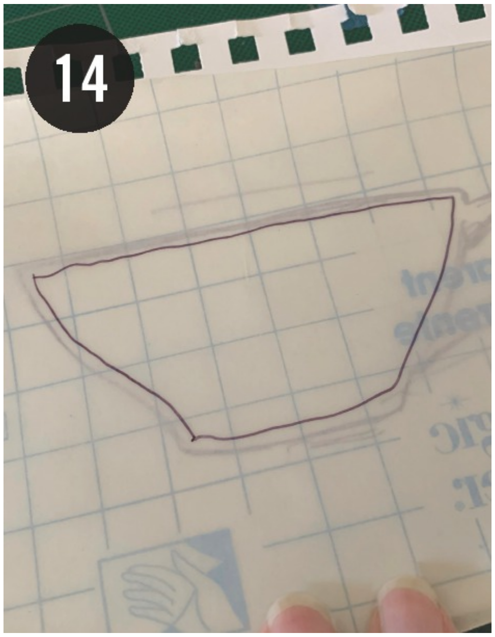


Figure 5.17 *(14) Mask is cut into clear shelf-lining paper based on the teacup template in Figure 5.6.*

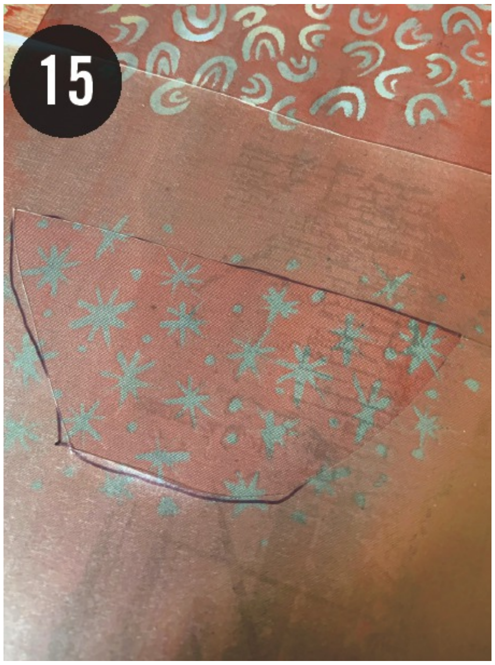


Figure 5.18 *(15) Star pattern is masked to fit teacup shape.*

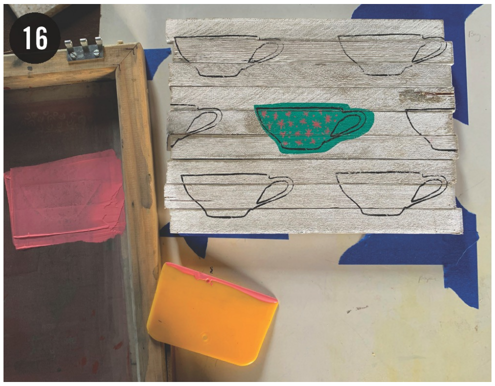


Figure 5.19 *(16) Coral stars are printed with small scraper.*

Printing the Fourth Color: Yellow

Step 11 The final step is to mask out everything on the screen except the type. Center on the cup. Measure top to bottom and side to side to double-check placement.

Step 12 Flood the screen with yellow ink, print twice, and let dry. Voila! You are done.

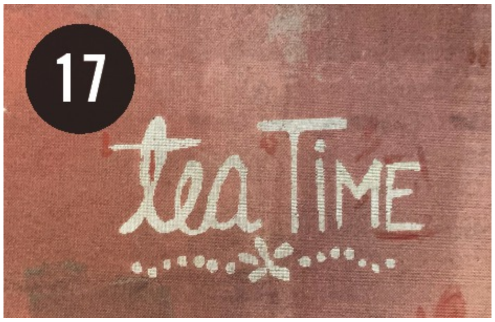


Figure 5.20 *(17) Hand-painted lettering on screen*

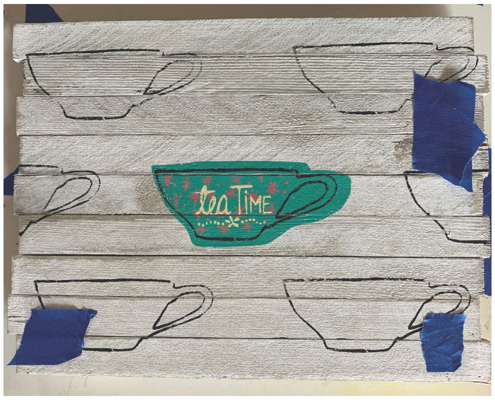


Figure 5.21 *Yellow type printed on top. Yellow was mixed with white to make a more opaque ink to show up better on the darker colors. Blue painter's tape was used to align the screen.*

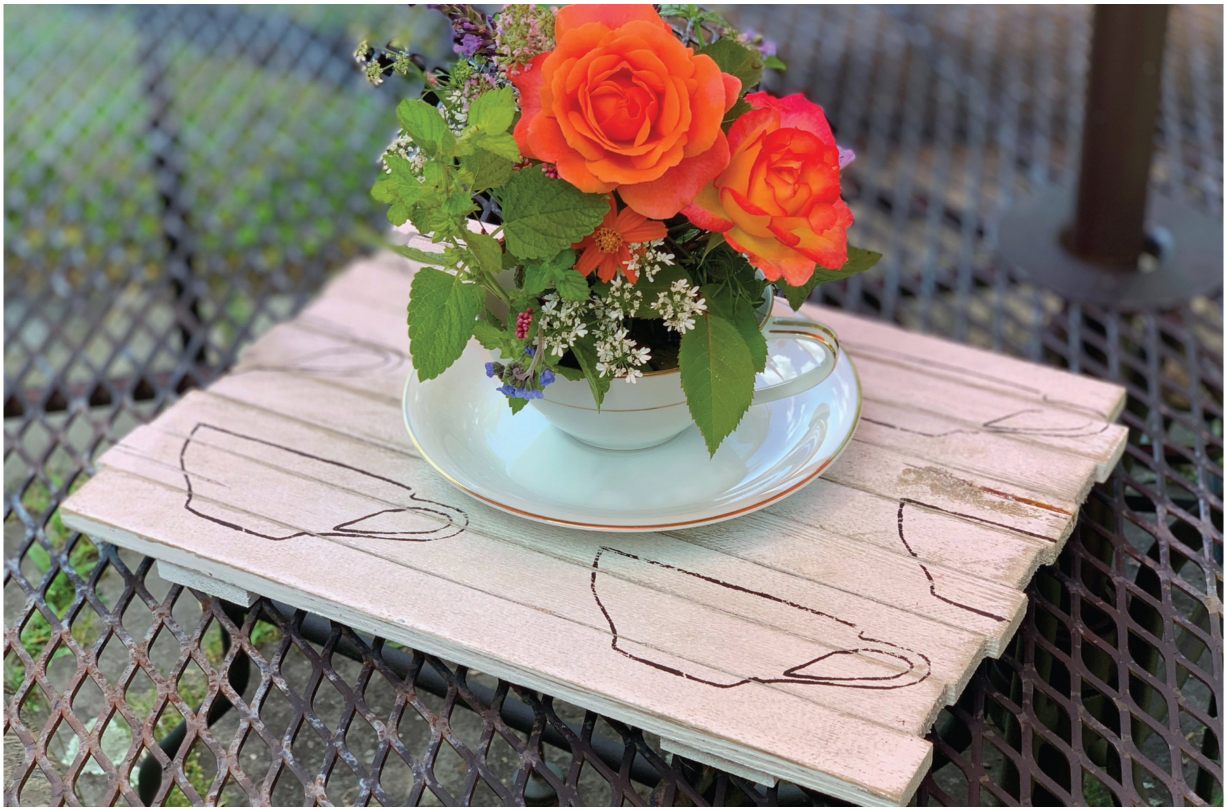
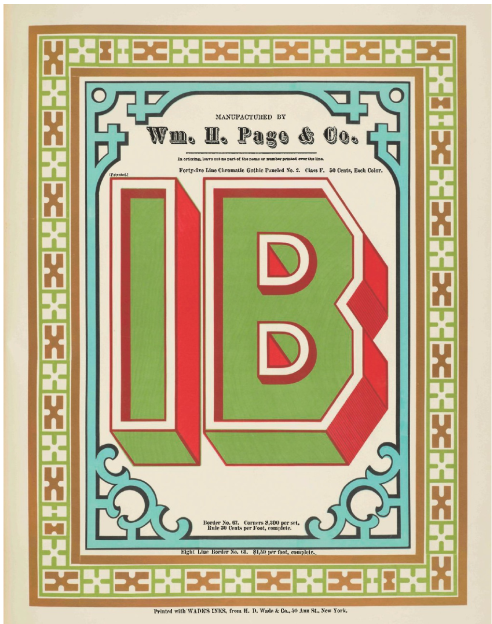


Figure 5.22 *Final project used as a centerpiece*

Screen Print a Frame with a Cricut Stencil

This project can be done with any type of stencil, but there is value in demonstrating how the popular Cricut can be an asset for cutting detailed designs. Many crafters, makers, and schools have a Cricut, which is like a printer that can cut out any shape from a variety of materials. Stencil vinyl for the Cricut is used to create two patterns for this project. (Figure 5.25) The vinyl has a low-tack adhesive side that is attached to the back of the screen and is repositionable. The ink washes off easily, so the stencil can be reused.

The inspiration for the design comes from *Specimens of Chromatic Wood Type, Borders, Etc.*, a book by the William H. Page wood type company from 1874. (Figure 5.23) As you can see in the border template (Figure 5.31), the pattern is intricate, with small pieces, making it too difficult to cut by hand. The stencil creates small pieces within the strip. Those pieces are pulled out for the main stencil, but are saved and attached separately to create another version of the border. (Figure 5.27)



MANUFACTURED BY

Wm. H. Page & Co.

In ordering, leave out no part of the name or number printed over the line.

Forty-five Line Chromatic Gothic Paneled No. 2. Class F. 50 Cents, Each Color.

(Patented.)

Border No. 67. Corners $,300 per set,
Rule 30 Cents per Foot, complete.

Eight Line Border No. 61. $1,50 per foot, complete.

Printed with WADE'S INKS, from H. D. Wade & Co., 50 Ann St., New York.

Figure 5.23 *Inspiration for border comes from a book printed in 1874.*

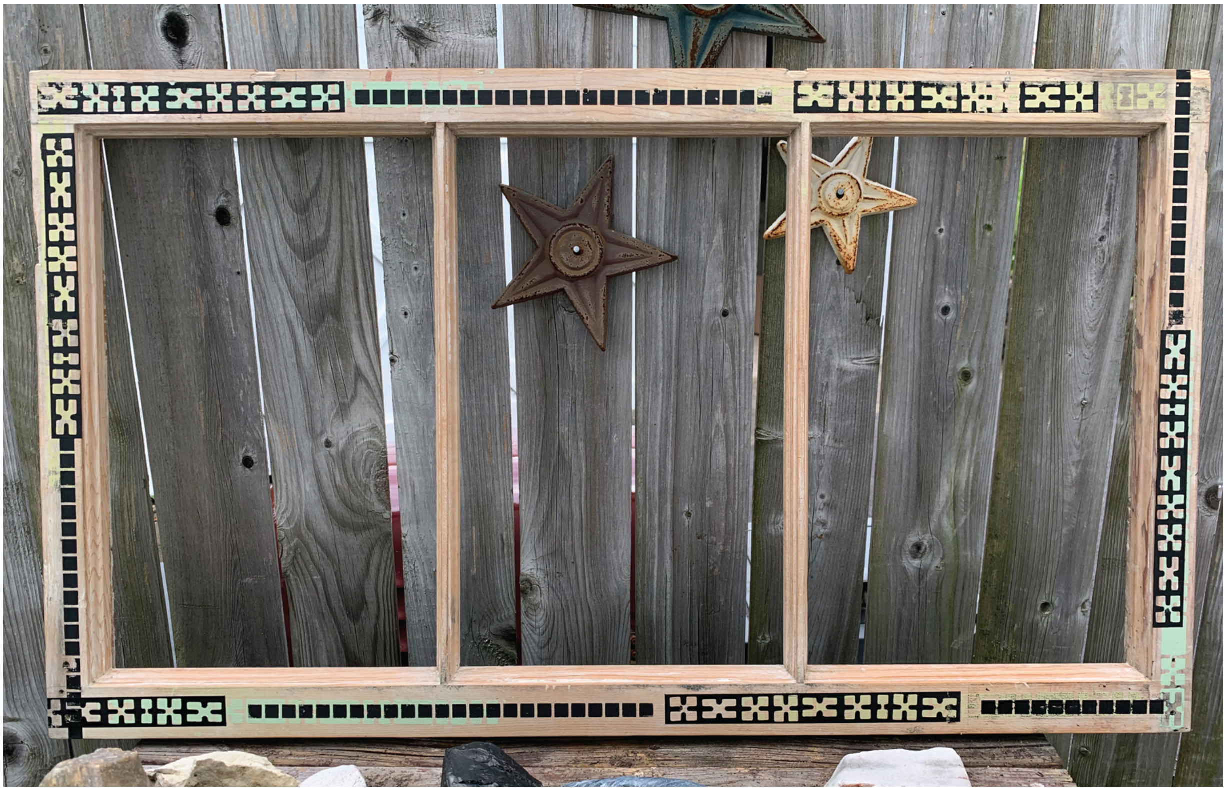


Figure 5.24 *Final screen printed frame*

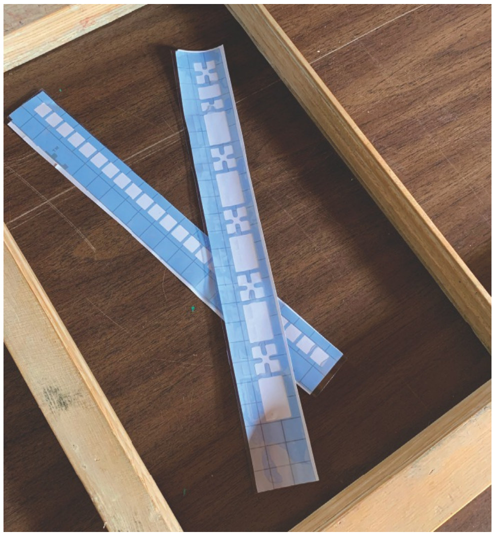


Figure 5.25 *Double-check the size of the stencils cut by the Cricut to make sure they fit and where to start the design. This example starts with printing a light green with the page border.*

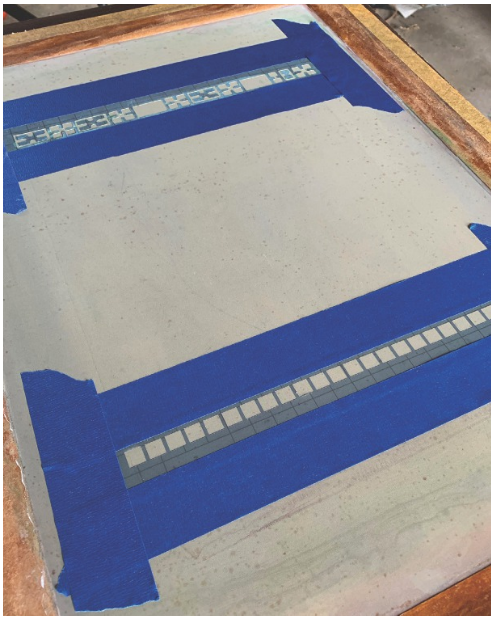


Figure 5.26 *Place stencils on a clean blank screen toward its edges. Create a tape border to protect printing surface from ink overflow.*

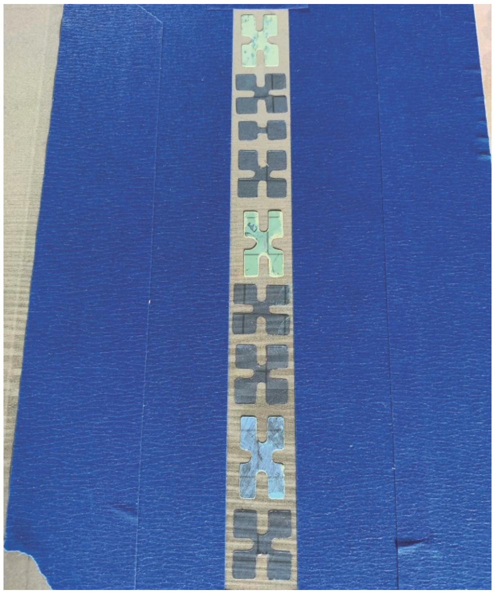


Figure 5.27 *This stencil was created for the black border (a negative of the original design). It was created from the leftover stencil pieces and placed inside of a taped rectangle.*

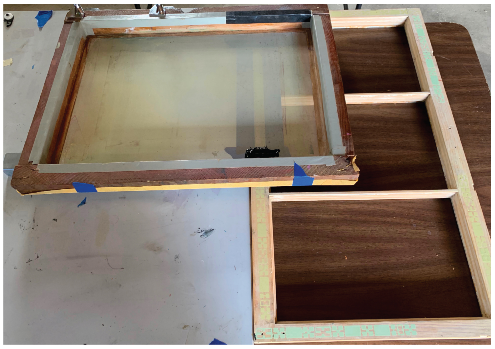


Figure 5.28 *As with any screen printing project, some type of registration system or rig has to be in place, especially when trying to print a border on a narrow strip of wood. There is no way to easily eyeball or guess placement. In this setup, the screen-hinged board was leveled with the height of the window frame. That way the window frame can be pushed up to the edge of the board, keeping it flush to the screen, no matter what side is being printed. Then the artwork was measured and positioned on the edge of the screen lined up to the window frame. For printing all edges, it is just a matter of rotating and sliding the window frame against the board to line up with the stencil.*

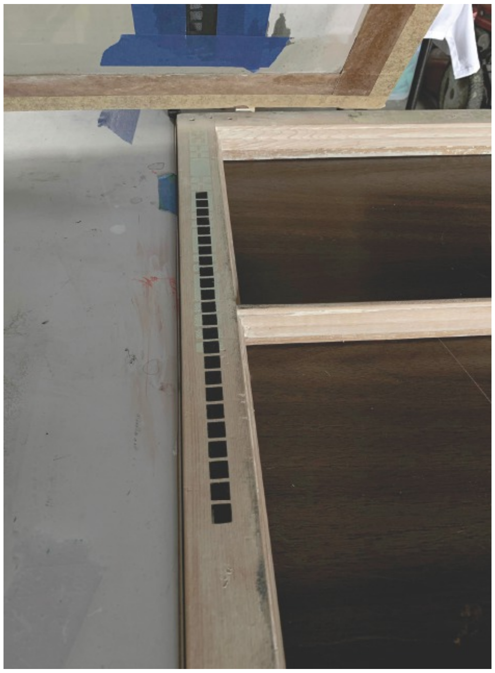


Figure 5.29 *Printing black squares border over green*

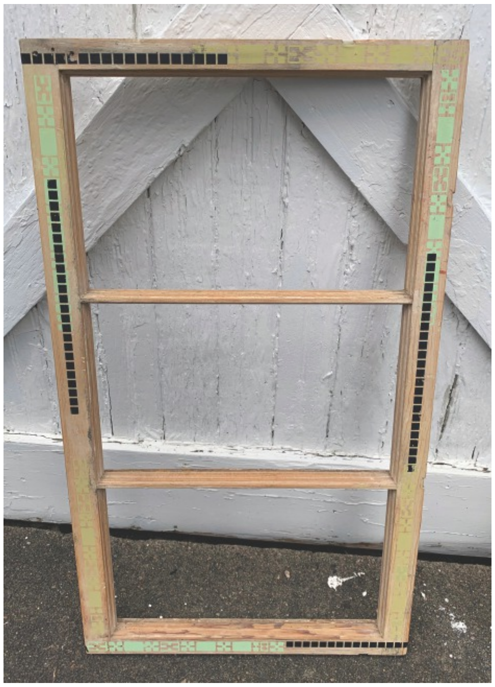


Figure 5.30 *State before printing final black stencil made from Figure 5.27*

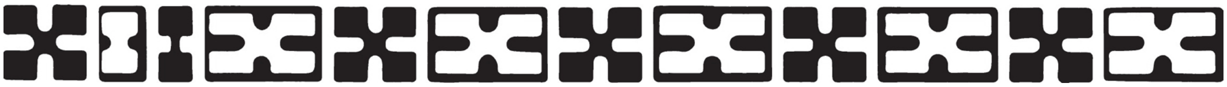


Figure 5.31 *Template for border*

PROJECT 10

Print a Coffee Mug and Coaster Set

Screen printing has many steps, as you learned in the last project, especially for multiple colors. We will stick to single-color printing in this project and use photo emulsion to make an image stencil—no hand cutting of stencils needed!

First, you will make a transparency, expose it to burn the screen, and then print. Printing on a curved surface like a mug is a unique challenge, but we will learn how to do it two different ways. Printing on ceramics and glass involves mixing up the right kind of ink and heat-setting it. This is not as complex as it sounds and can be done easily at home. Make sure to get your supplies well ahead of time since they are specialized and may take some time to order.

EZScreenPrint Stencil

For this matching mug and tile coaster, we will use the EZScreenPrint standard stencil. This product is exclusive to the brand and offers the do-it-yourselfer an easy way to burn an image into screen printing fabric. The fabric sheets come coated with light-sensitive photo emulsion. Place the film positive on top, expose in the sun, and wash out in water as demonstrated in chapter 2.

Preparing the Transparency

In the photo emulsion process, a film positive is necessary to burn a screen with an image. The image needs to be solid black without gray values, because gray will not expose properly. There are three options to get an image on to transparency film:

1. Print the image from your computer to transparency film, either on an inkjet or laser printer, making sure to use film made for the printer. (Figure 5.34)

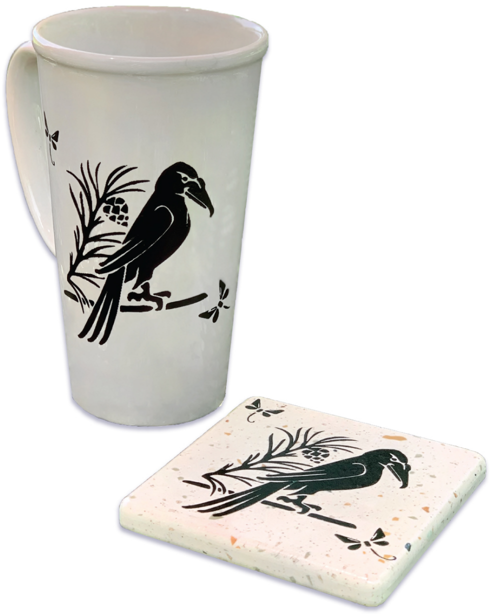


Figure 5.32 *Mug and coaster printed with EZ stencil*

Supplies

- ☐ BBlank ceramic or glass mugs
- ☐ BCeramic tiles or countertop samples, such as Corian
- ☐ BEZ stencil or other screen printing stencil method to make image (see project 9)
- ☐ BSpeedball fabric ink
- ☐ BAcrylic craft paint, such as Martha Stewart multisurface acrylic paint
- ☐ BWide painter’s or masking tape
- ☐ BRubbing alcohol
- ☐ BPlastic spreader or squeegee

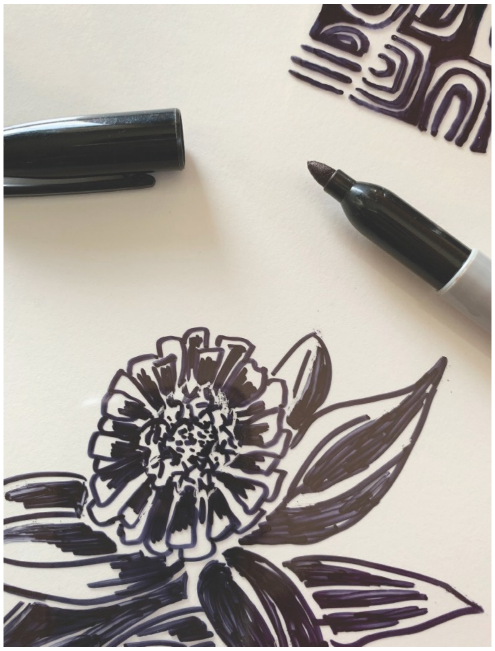


Figure 5.33 *With a black marker, draw directly on the transparency to create a film positive.*

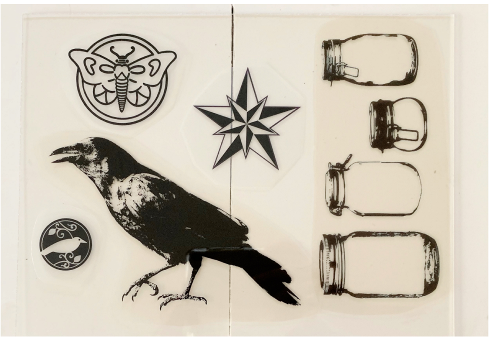


Figure 5.34 *A variety of film positives printed on an inkjet printer using inkjet film. If you have multiple images to expose, gang up the film positives for a single exposure and wash out.*

The image needs to be a dense black for a good exposure. If it comes out gray, print two copies, align, and sandwich together with transparent tape to create a solid black.

2. Use a copy machine to get the image on to the film. Make sure to use transparency film meant for copiers and laser printers (inkjet film will melt).

3. Draw directly on any type of transparency film with a permanent black marker or paint with black. (Figure 5.33) Make as solid as possible.

Exposing the Stencil

Review chapter 2 on pages 36–37 for detailed steps on how to expose the EZ stencil.

To get many images out of a single sheet of EZ stencil, cut off only what you need and leave an ample border for taping down while printing.

If you have multiple images, gang them up to fit on one sheet. (Figures 5.34 & 5.35) Cut off any- extra transparency film that might overlap another image, resulting in a shadow exposure. After developing, cut apart and leave some margin for taping to the item. (Figure 5.36)

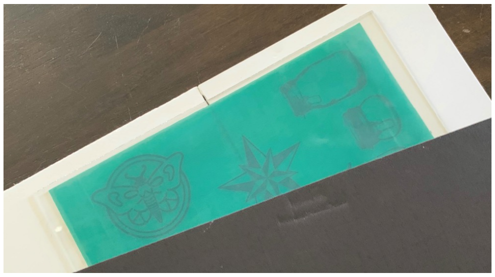


Figure 5.35 *Film positives ganged up to fit EZ stencil*

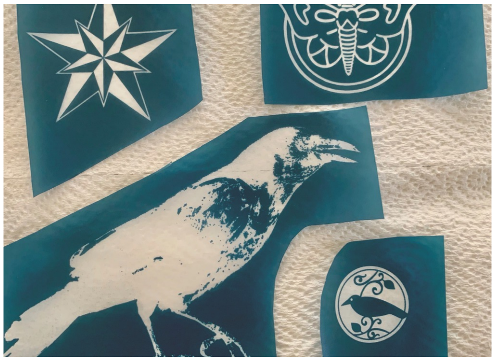


Figure 5.36 *Finished screen stencils cut apart and ready to print*

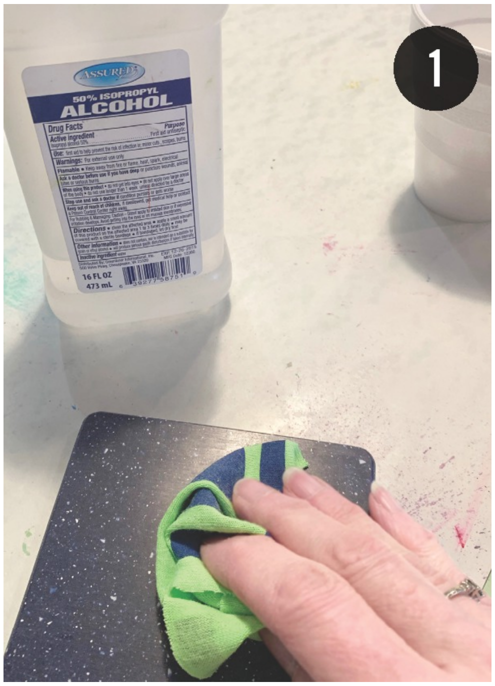

1
ASSURED
50% ISOPROPYL
ALCOHOL
16 FL OZ
473 mL

Figure 5.37 *(1) Degrease the tile with rubbing alcohol.*

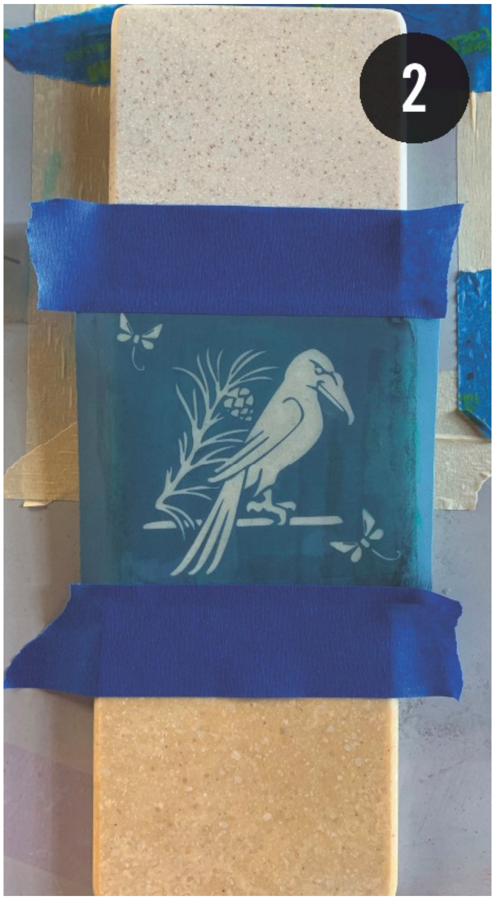


Figure 5.38 *(2) Printing setup for tile*

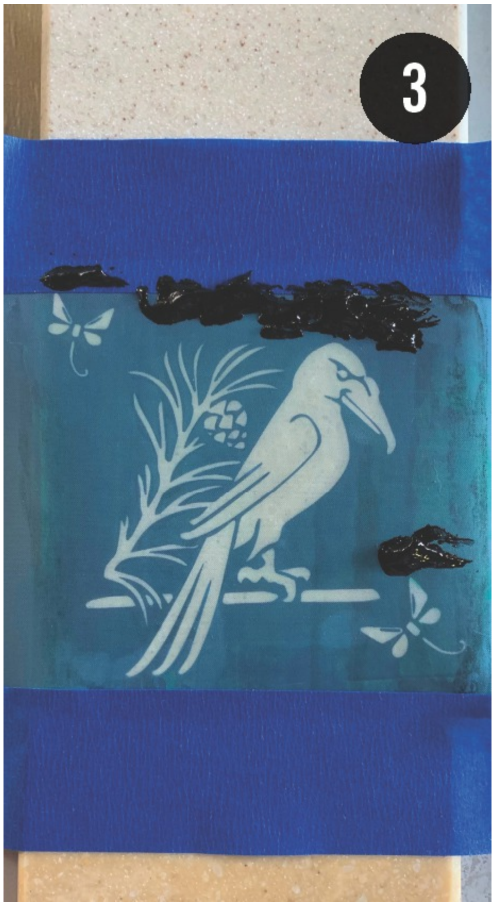


Figure 5.39 *(3) Place small amounts of ink at the top.*

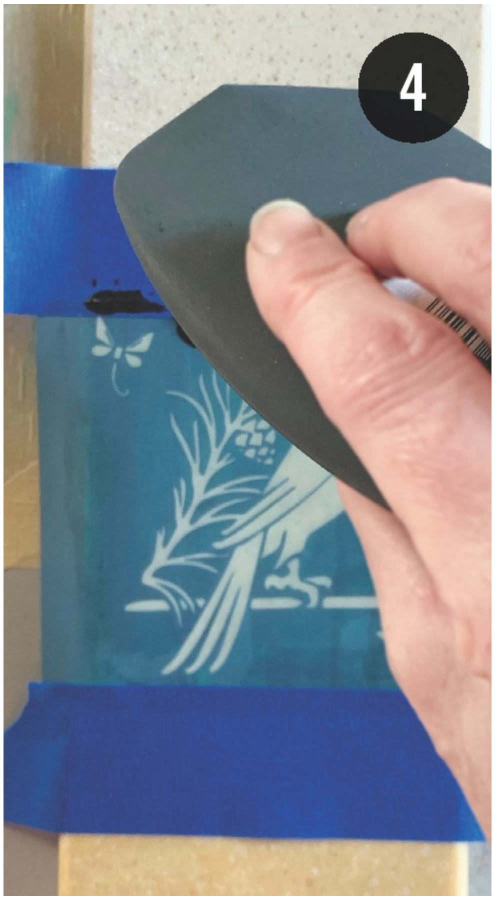


Figure 5.40 *(4) Use a scraper or spreader to print.*

Printing the Mug and Tile Coaster

For ceramic, tile, and glass printing, mix a ratio of half fabric and half acrylic craft paint to make the printed mugs dishwasher safe and the tiles durable. Mix and store colors in a container with a lid, so the ink will be usable for months.

There are a few brands of acrylic craft paint that will work. Opaque colors from Martha Stewart's line of multisurface acrylic paints are used for the projects in this chapter.

Step 1 Wash glass and ceramics with soap and water. Wipe with rubbing alcohol to degrease the surface. (Figure 5.37) Allow surface to dry fifteen minutes before printing.

Step 2 Set up to print. Secure the stencil with tape and cover nonprinting surfaces. For the tile, two tiles were placed at the top and bottom to create a simple printing rig. (Figure 5.38) The tiles hold the to-be-printed tile in place and because the image prints to the edge, the top tile provides a surface to hinge the stencil. Then it is easy to flip the stencil up and out of the way for the next tile to be printed.

Remember to do a test print on paper first to check the stencil

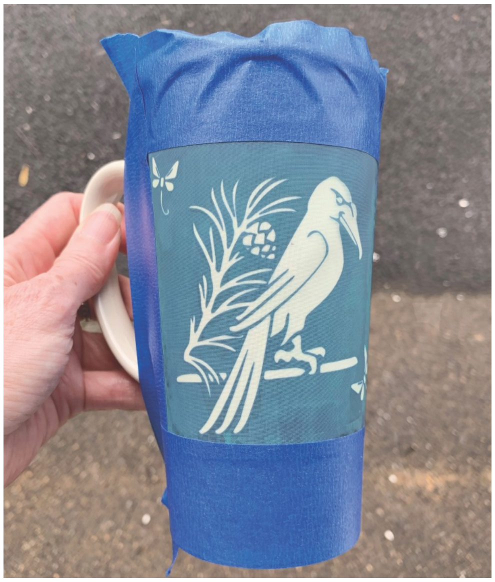


Figure 5.43 *(left) Stencil taped to mug ready to print*

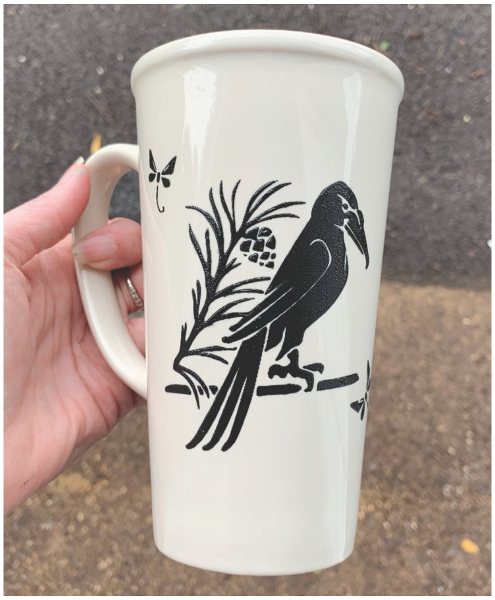


Figure 5.44 *(right) Finished mug*

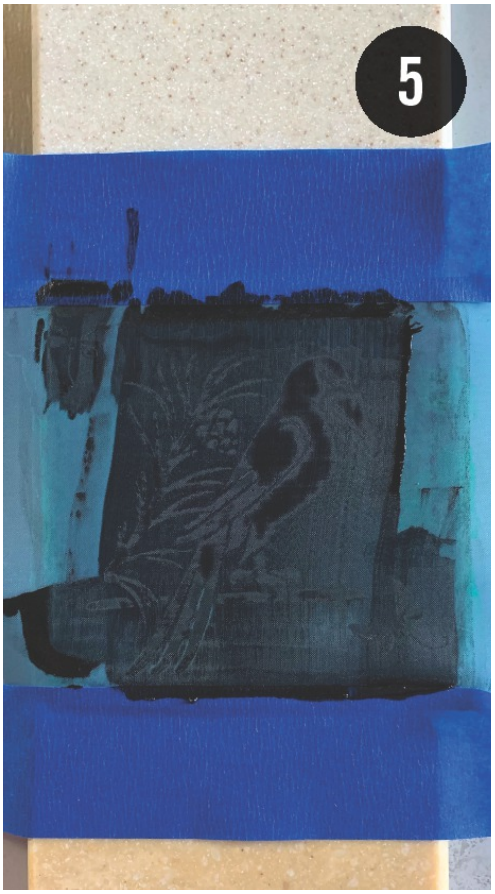


Figure 5.41 *(5) Cover all areas with ink.*

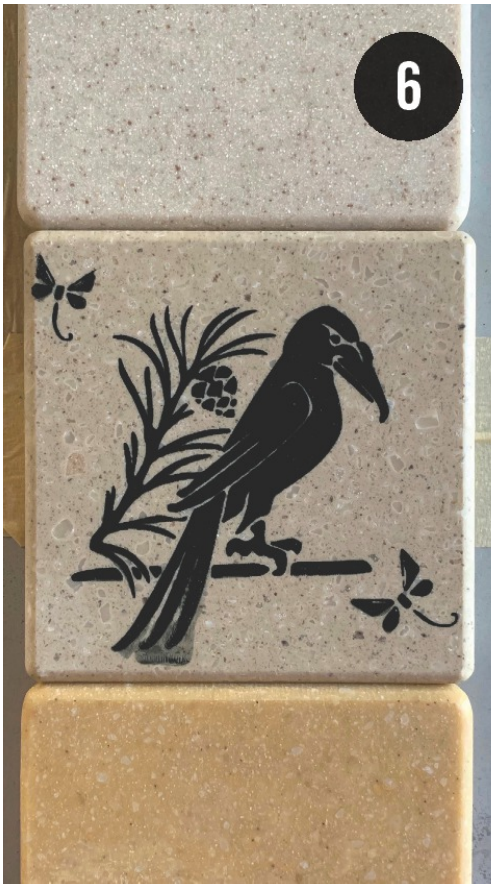


Figure 5.42 *(6) Finished tile*

Step 3 Print the objects. Use a plastic spreader to push the ink mixture through the stencil. With this stencil, there is no need to "flood the screen" as in project 9.

- Drag the spreader over the stencil two to three times, making sure all areas print. Slowly pull back a corner to check printing. Place back down and go over again if an area looks light.
- If the print bleeds or has too much ink, wipe it off the surface with a damp towel. Clean with alcohol again, and reprint.
- Printing with EZ stencils can be messy because there is no frame like a traditional screen for handling while printing. Use wide tape, and handle by the taped edges to keep hands clean.
- Take care when wrapping the stencil on the curved surface of a mug. (Figure 5.43) Check for wrinkles that might interfere with printing.

Sometimes the art may be too big for the mug, so it will not lie flat for a clean print. Work in sections until all areas are inked.

Step 4 Let cure for twenty-four hours. Then heat-set the ink by following the boxed instructions above.

Heat-Setting the Ink

- Place projects securely in a cool oven. Glass must heat gradually to avoid breakage. **Do not place glass in a hot oven!**
- Set oven temperature to 350 degrees.
- Once temperature has reached 350 degrees, allow the project to bake for thirty minutes. You will notice an off-gassing smell. It is a good idea to have adequate ventilation, whether it is an open window or the oven hood vent.
- After thirty minutes, turn off the oven and let cool down completely before removing projects.
- Do not use projects for seventy-two hours.
- As a final step for tiles, spray a clear enamel to make the print resistant to scratches.

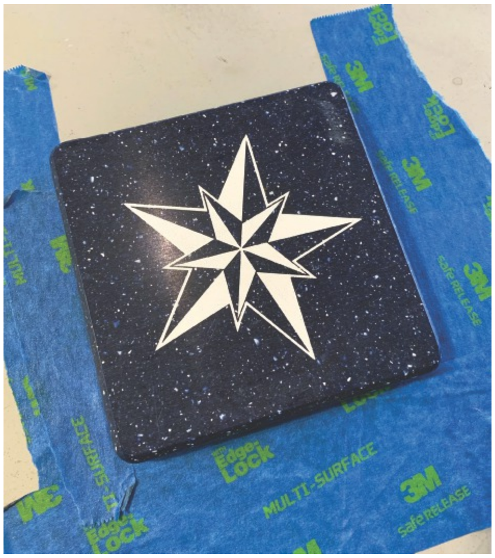


Figure 5.45 *(left) Another way to set up a printing rig template is to layer tape to build up edges that secure a tile.*

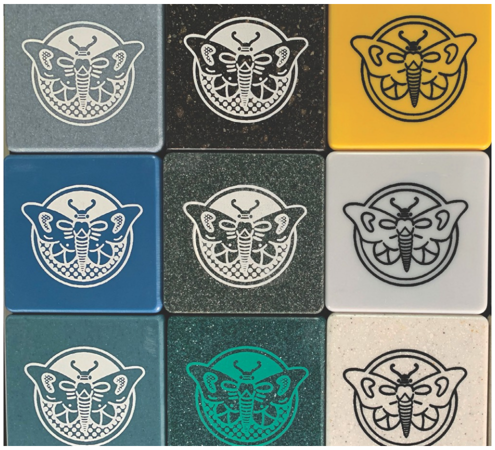


Figure 5.46 *(below) More tile designs printed with an EZ stencil. The tiles are upcycled countertop samples.*

Screen Printing a Mug Hack

You can print a mug using a regular screen printing frame by carefully rolling it over the image. This is by no means a foolproof or efficient process to print large quantities, but it does work! The mugs and koozies in Figures 5.48 and 5.50 were all printed in this manner.

Images that are relatively square or circular work best for this process. Long images that wrap around a curved surface will not print completely unless there is no handle. (Figure 5.47) Also, images will not print close to the handle. The good thing about this trial-and-error process is the ink wipes off ceramics easily, so there is no need to worry if it does not print right the first time.

Step 1 Wipe down ceramic surfaces with rubbing alcohol.

Step 2 Flood the screen from the front, just like a regular screen print. Make sure to use the fabric/ acrylic multisurface ink mixture.

Step 3 Flip the screen over, and lay it flat on the table. Line up the mug or glass to the left of the art. (Figure 5.47) If there is a handle, try to position the mug so when it rolls over the art, the handle does not block the art from printing.

Now roll the mug smoothly and steadily over the art. Try not to slide it or go too fast. Check that it printed okay. If not, wipe it off, degrease, and try again. It might take three or four times practicing to get the right touch.

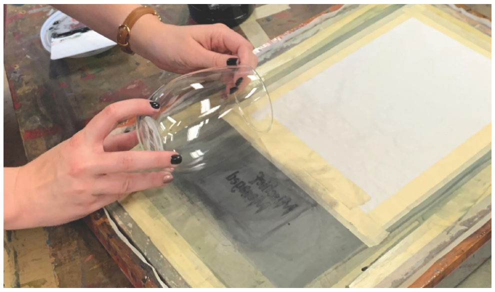


Figure 5.47 *Printing on a glass without a handle allows for wider artwork. The glass is in position to be rolled over the back of a flooded screen.*

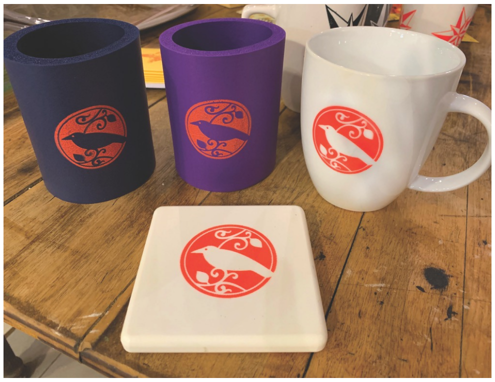


Figure 5.48 *The koozies and mug were all roll printed.*

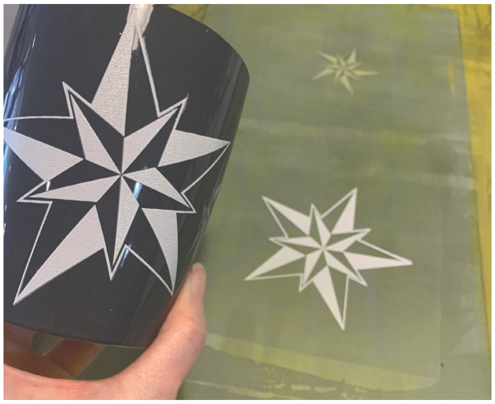


Figure 5.49 *Mug printed from rolling over the flooded star screen*

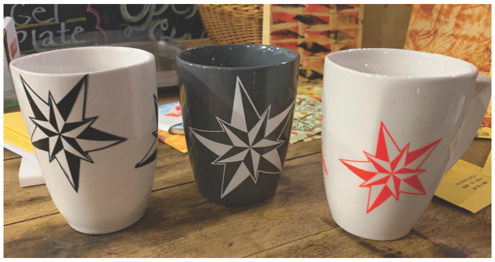


Figure 5.50 *Three different mug styles. All inks were mixed fifty-fifty with fabric and acrylic craft inks.*

Homemade Exposure Unit Setup

If you are really interested in getting serious about screen printing, it is worth coating your own screens and setting up an inexpensive exposure unit in your home. We are always at the mercy of the weather and seasons, so you cannot rely on the sun to expose screens.

You will need the following for your home exposure unit:

- Screen frame coated with photo emulsion
- Photo emulsion: Ryonet WBP Dual Cure Water Based Plastisol Hybrid Emulsion. There are other emulsions, but you will have to figure out the exposure times because they differ for each brand.

  Note that the name Plastisol is another type of screen printing ink. Speedball and other brand screen printing inks work with this emulsion.
- A long spreader to coat the screen or a long strip of mat board about the width of the screen and a couple of inches high
- An exposure lamp. A ten-dollar five-hundred-watt work lamp from the hardware store yields exposure times of ten to twelve minutes.
- An exposure board similar to the one used for the EZ stencils. Use tempered glass. Otherwise, the acrylic sheet will melt and regular glass will crack from the heat of the lamp. The exposure setup in Figure 5.51 uses the weight of the tempered glass to hold down the transparency to the screen frame.
- A sink with a sprayer to wash out the emulsion after exposing
- After the print project is finished, an all-purpose emulsion remover/screen cleaner will restore your screen for the next project.

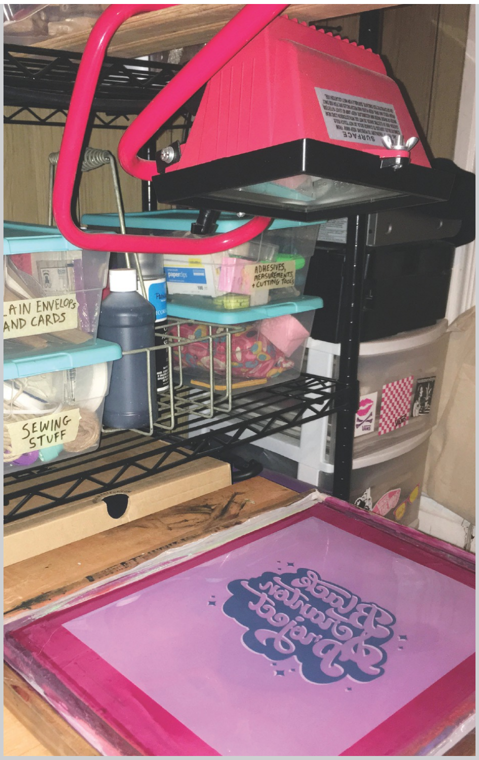


Figure 5.51 *Setup to burn screens includes an inexpensive work lamp and tempered glass.*

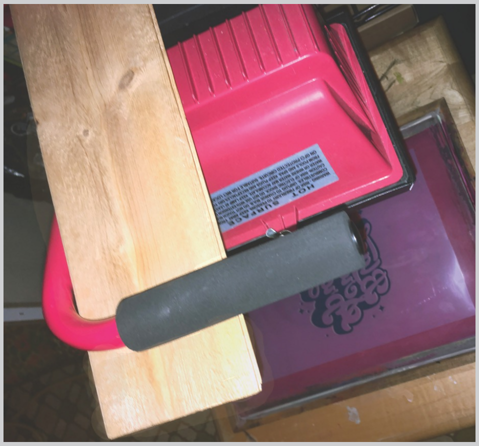


Figure 5.52 *The work lamp hangs from a board to suspend it directly over the artwork and screen.*

PROJECT 11

Screen Print on Textiles and Combined Techniques

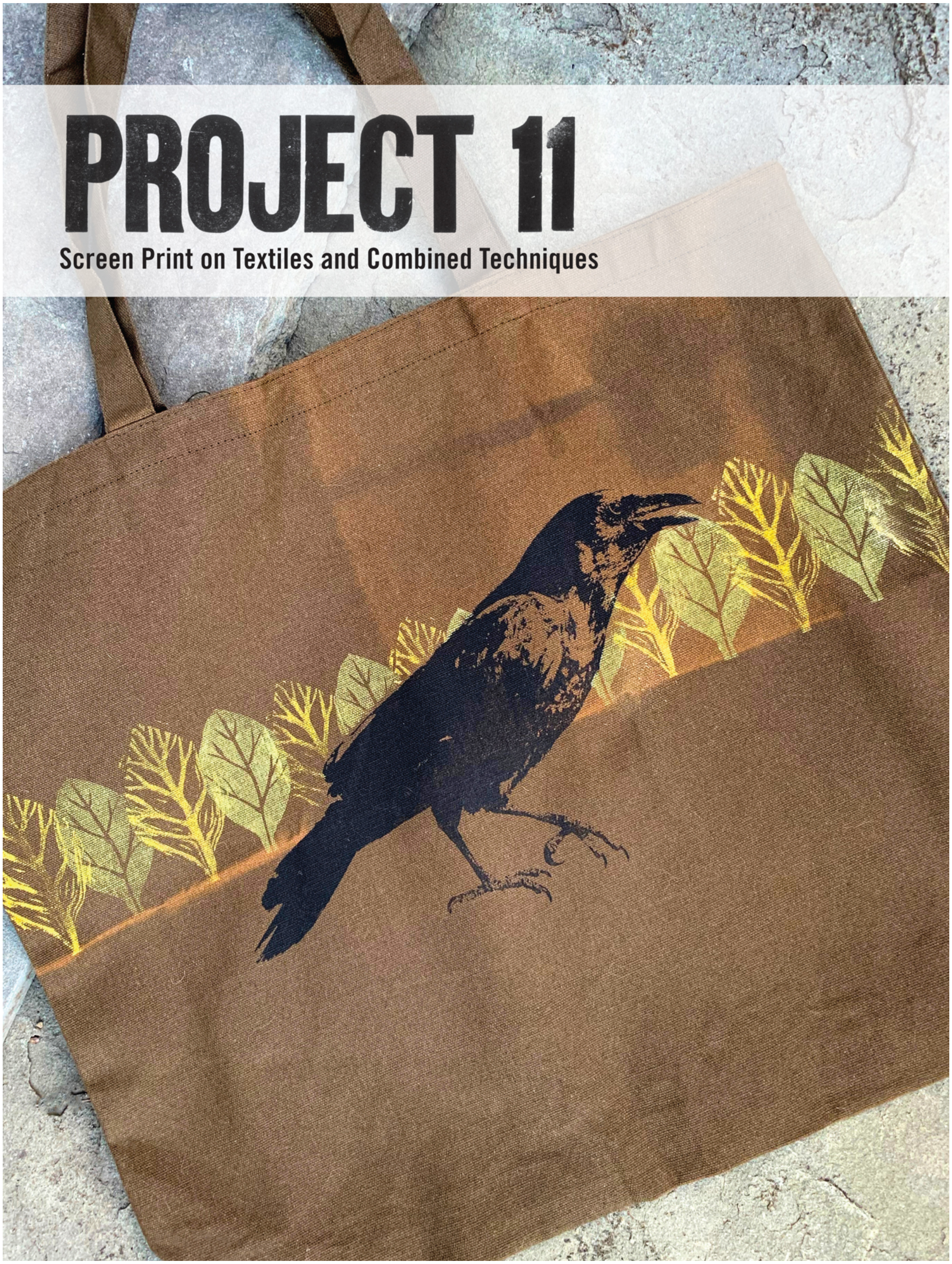


Figure 5.53 *Screen and relief printed tote*

Supplies

- ☐ BBlank cotton totes, T-shirts, etc.
- ☐ BScrap fabric for patches
- ☐ BScrap paper for tests
- ☐ BStencil making supplies
- ☐ BScreen frame or EZ stencil
- ☐ BStamps
- ☐ BFabric screen printing ink (Speedball/Blick)
- ☐ BWide painter’s tape

Printing on textiles opens up so many opportunities for creativity in making unique and functional items. Printing T-shirts is usually the first thing people think of when it comes to textile screen printing, but you can print on anything you can dream up! We will explore printing on tote bags, patches, and, of course, the standard T-shirt. After you get comfortable with the process, try making scarves, hats, pillows, curtains, table runners, lampshades, and even your own wall covering.

For this project, we will start off with combining relief stamping with screen printing to create colorful pieces that require little registration. Then we will finish with straightforward screen printing on fabric patches and T-shirts. We will use the EZ stencil process from project 10, but any of the processes we have explored, such as the cut and painted screen stencils, are options too.

Crow and Leaf Tote

Any size or color tote bag will work. Use stamps from your personal library developed from past projects or cut new ones. For this project, the leaf stamp from the Leaf Window Luminaries on pages 92–94 is used, in addition to a newly carved leaf stamp to complement it. (Figures 5.54–5.56)

The crow image was taken from a photograph and turned into a high-contrast image, dropping out all the gray values to achieve a solid black image for the transparency. (Figure 5.58) To create the high-contrast effect, the photo was altered in a photo editing program, but the same high-contrast result can be achieved by making a photocopy of the photograph.

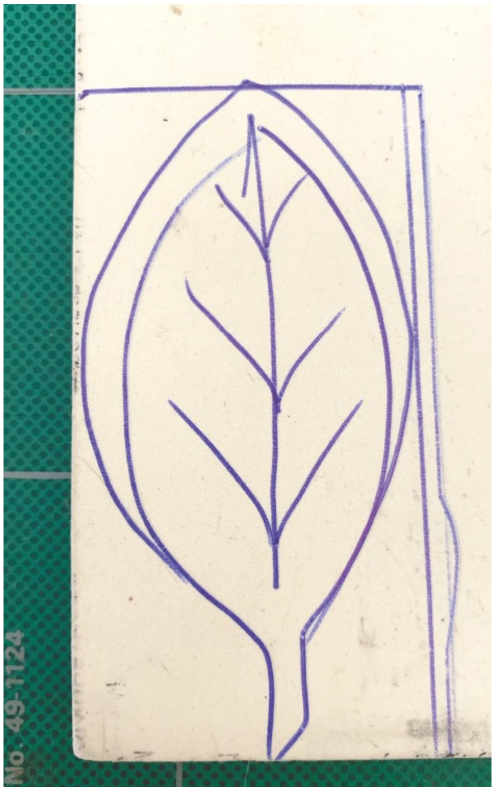


Figure 5.54 *Leaf design is drawn on an easy-cut block.*

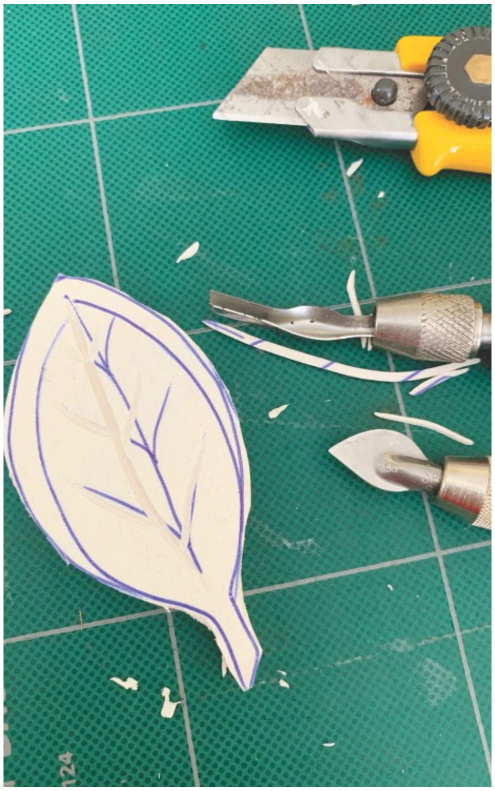


Figure 5.55 *Block is carved and background is cut away to allow for easier visual alignment.*

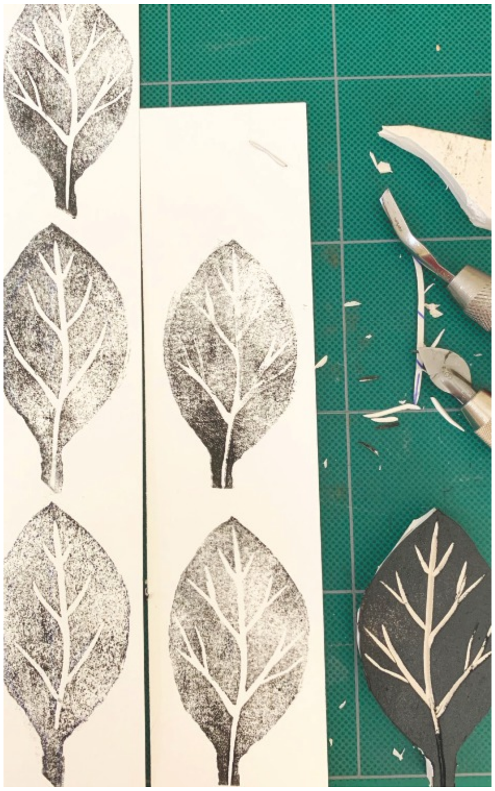


Figure 5.56 *Test prints of the leaf to refine image during carving stage*

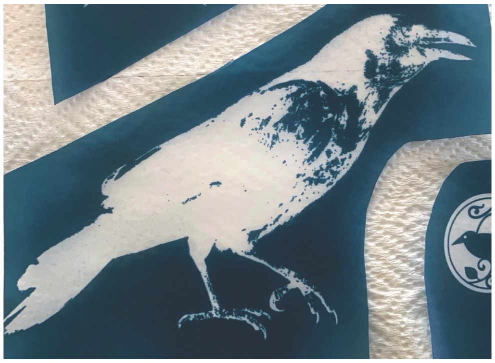


Figure 5.57 *EZScreenPrint stencil*

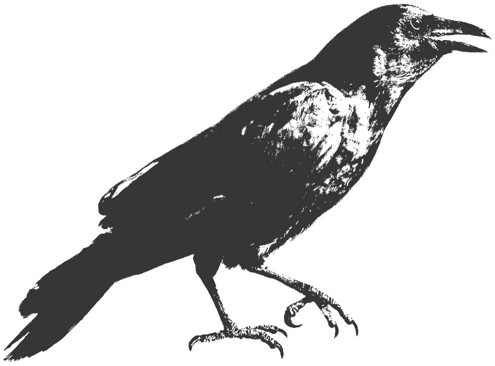


Figure 5.58 *High-contrast crow from photo. All gray values are removed to create a suitable image for exposing.*

Step 1 Create screen using any of the stencil methods: EZ stencil, cut, drawing fluid, or other photo emulsion processes. This project uses EZ stencil. (Figure 5.57)

Step 2 Print screen image first (in this example, the crow). The tote bags were faded from the sun, so the fading is used as part of the design, becoming a horizon line for the leaf stamps. (Figure 5.63)

Step 3 Let the crow completely dry. Then mask out the printed image with a paper stencil or masking tape in order to stamp around the silhouette. (Figure 5.62)

Step 4 Mix two colors from either the Charbonnel ink or Speedball fabric ink. Screen printing fabric ink also will work for stamping, but it is not as solid as the other inks and may not print as cleanly.

Because the tote is dark, colors will print duller and become slightly darker. It is a good idea to first test the colors on paper that is similar in color or value to the tote. Even if you do not have the exact match, it will still give you an idea if the color works or not. (Figures 5.60 & 5.61)

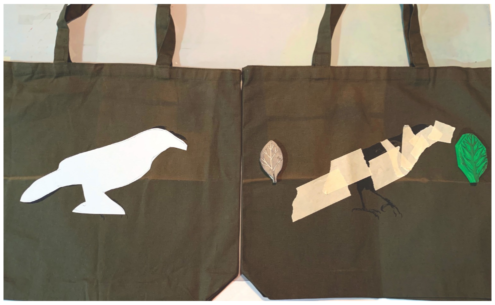


Figure 5.59 *Use a paperstencil or masking tape to protect the printed image in order to stamp around it. Print multiple totes at the same time to work more efficiently.*

Printing multiples also allows for variations and exploration as one tote becomes less precious and the pressure is off to get it right the first time.

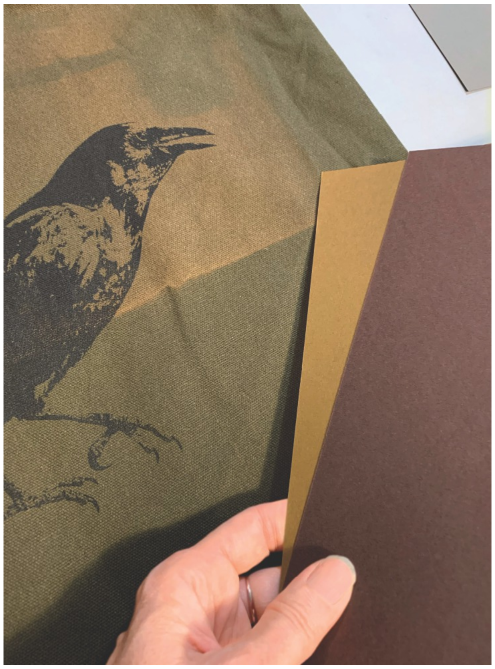


Figure 5.60 *To test ink colors, select papers close in value or color to give an approximation of the final print color.*

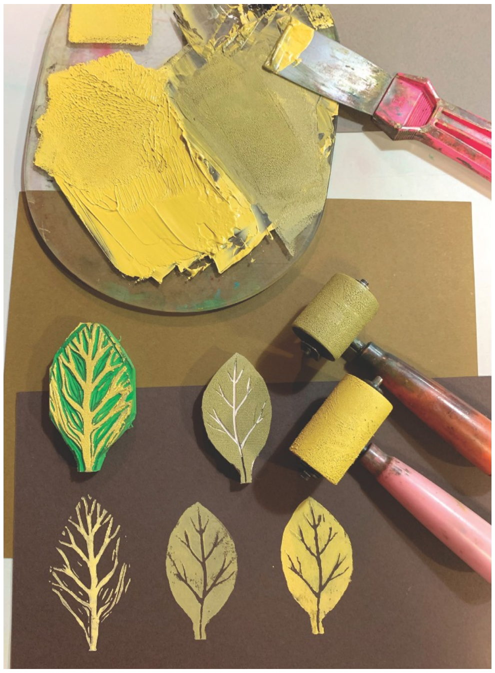


Figure 5.61 *Ink color tests are made on paper before printing the tote bag.*

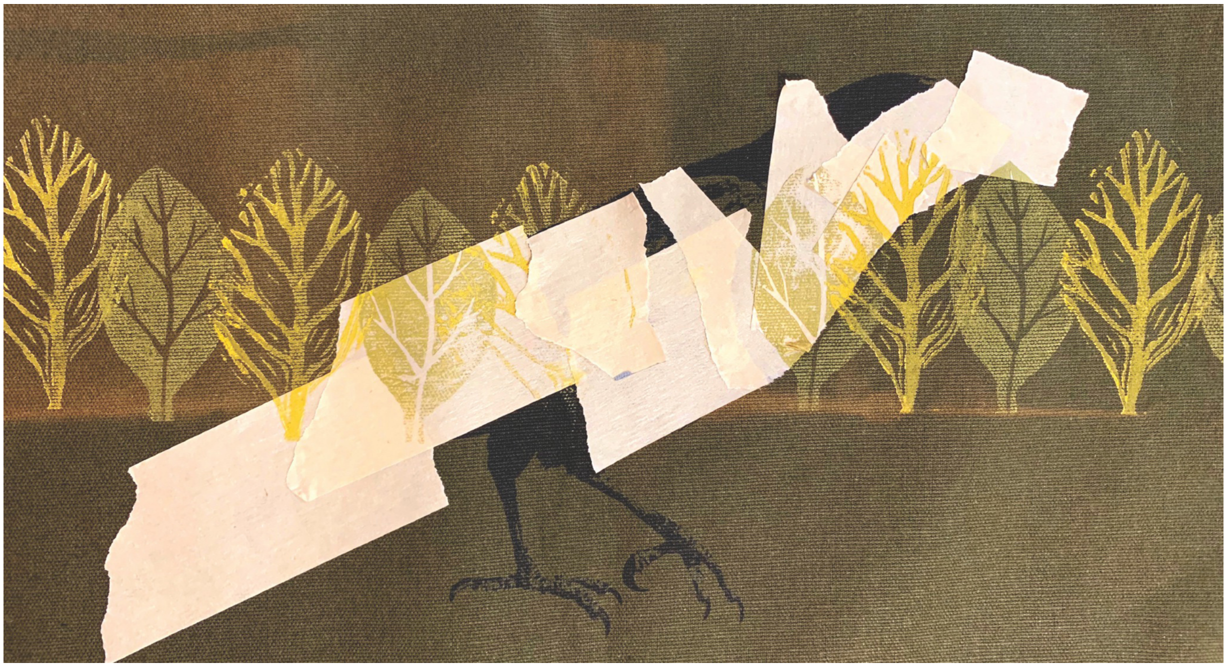


Figure 5.62 *Masking tape is used to protect the image during the stamping process.*

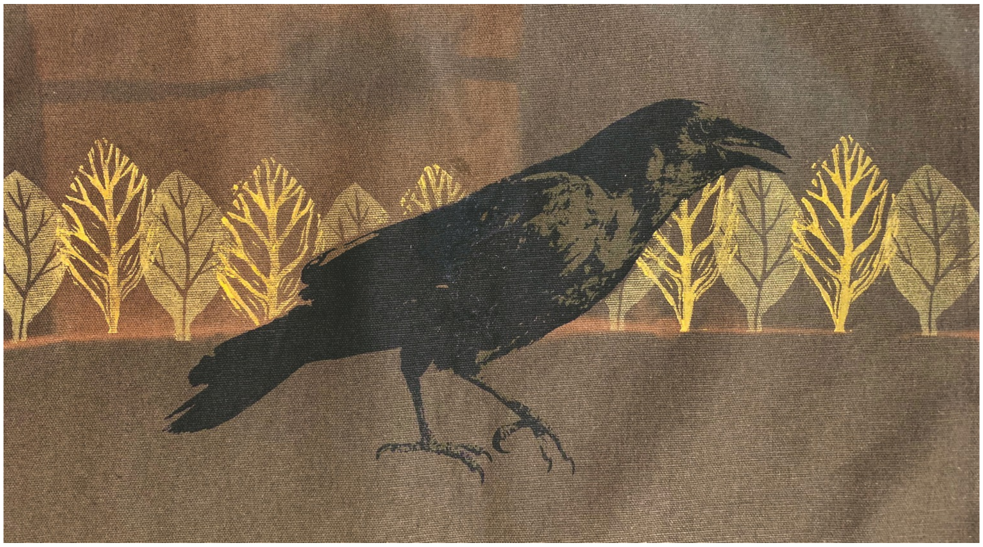


Figure 5.63 *Stamped leaf designs create a landscape of trees as they line up on the faded horizon line and appear to be behind the crow. If you like the idea of a faded line, fold up a dark-colored tote and leave it in the sun for a week or two.*

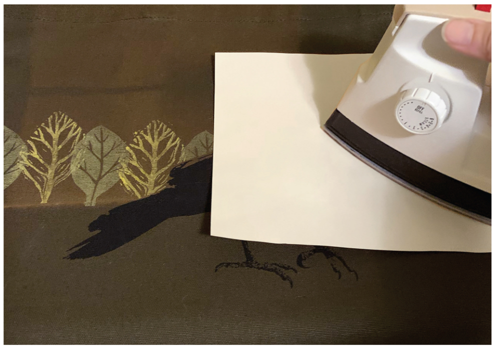


Figure 5.64 *Heat-set the ink by ironing. Place a thin piece of paper between the iron and art to protect the print.*

Step 5 Stamp the first color with one leaf stamp, leaving space between each impression for the second stamp. Visually line up the leaf stem to the faded or an imaginary horizon line. Carefully print over the masked areas, making sure you do not get ink on the crow image. You may be able to gently dab up wet ink with a cloth. There is even an ink eraser that works for small areas when completely dry.

Step 6 Let dry completely. Pull off masking tape. After the ink cures for a few days, heat-set with an iron at the Cotton setting, placing a piece of thin paper between the iron and the print. (Figure 5.64) The tote bag is now ready to use, and the ink will hold up in the wash.

Mason Jar Denim Tote

This project is generally the same process as the crow tote bag. The upcycled denim tote is screen printed with a continuous line of mason jars. The EZ stencil contains four jars, so it is printed three times end to end to stretch the design across the bag. (Figure 5.65)

To generate ideas as to what to print in the jars, a quick sketch and brainstorming session results in choosing flowers and fireflies for the design. (Figure 5.69)

The designs are carved out of erasers and stamped on the tote with Charbonnel ink. The flowers are purchased foam stamps, which can be cut into and altered if needed.

Because of the dark color of the tote, inks need to be tested to make sure they show up. The first version of the green for the stems is too muted, even though it looks light on paper. (Figure 5.67) More white and bright yellow is added to the ink, resulting in a brighter-green that shows up better on the blue denim. (Figure 5.68).

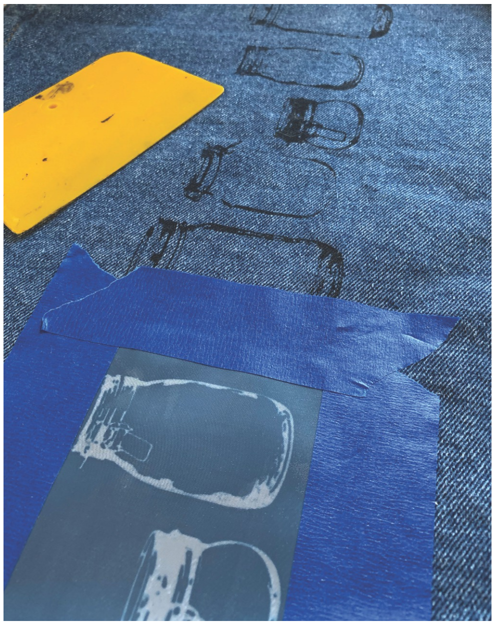


Figure 5.65 *Stencil printed back-to-back to fit the width of the tote*

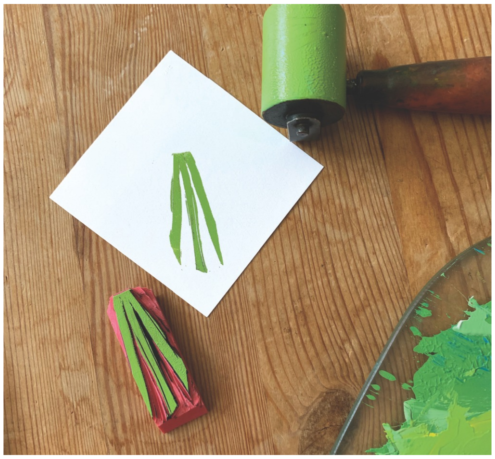


Figure 5.66 *Stamp carved from eraser for the flower stems and inked on paper for testing*

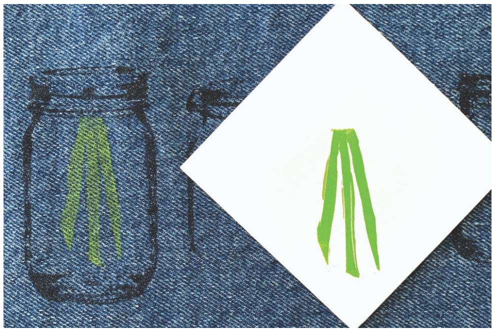


Figure 5.67 *Stamp tested on denim shows it is too muted, even though it looks fine on the white paper.*

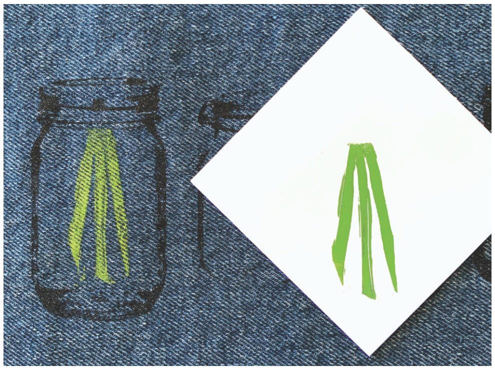


Figure 5.68 *Ink is lightened with white and bright-yellow, and the stamp is reprinted, resulting in good contrast.*

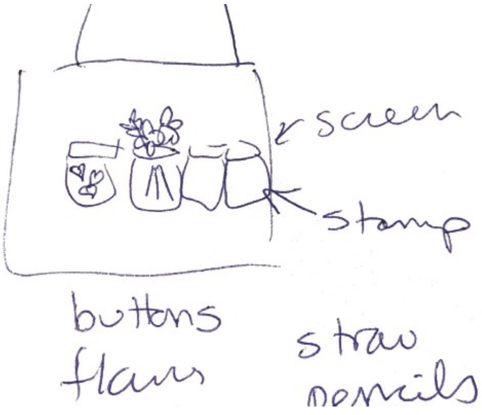

screen
stamp
buttons
flowers
straw
pencils

Figure 5.69 *Brainstorming scribbles*

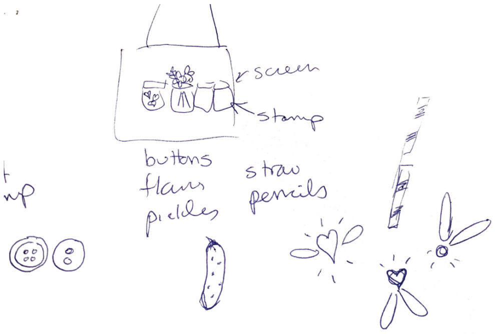

screen
stamp
buttons
flaws
pickles
straw
pencils

Figure 5.70 *Stamp tested for color on denim-blue paper*

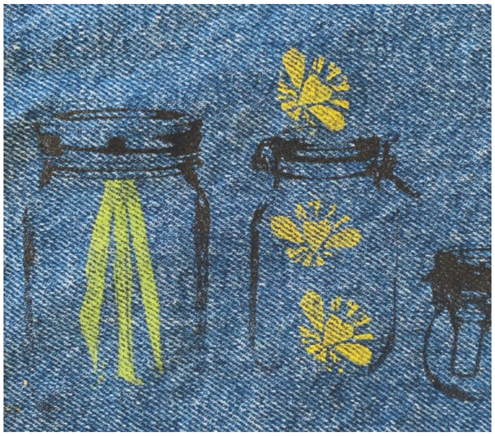


Figure 5.71 *Firefly stamp printed*

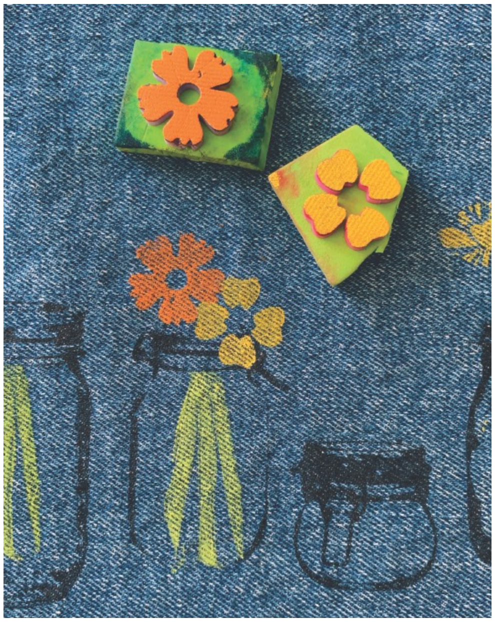


Figure 5.72 *Store-bought foam stamps are used for the flowers.*

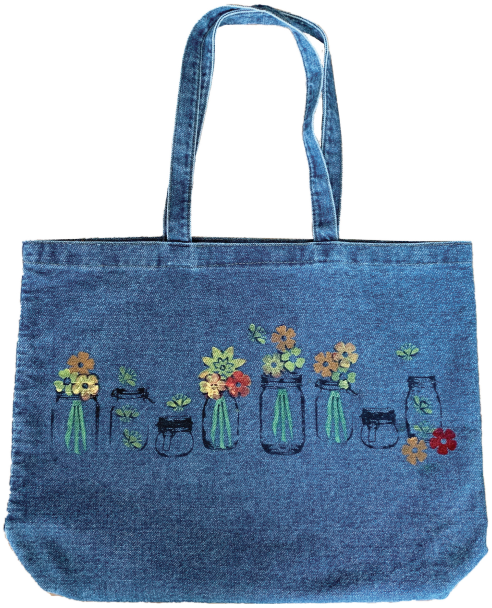


Figure 5.73 *Final printed tote*

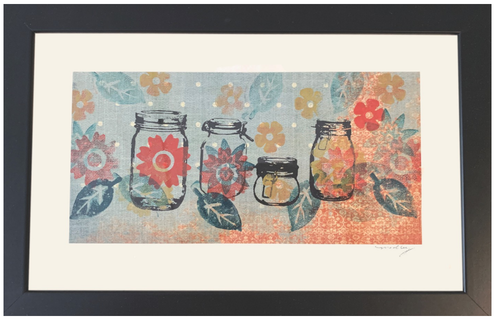


Figure 5.74 *As a habit, make extra prints on paper while the screen is inked (fabric ink works on paper too). Extra prints allow for exploration and other solutions. This print was screen printed on to preprinted scrapbook paper and then later stamped.*

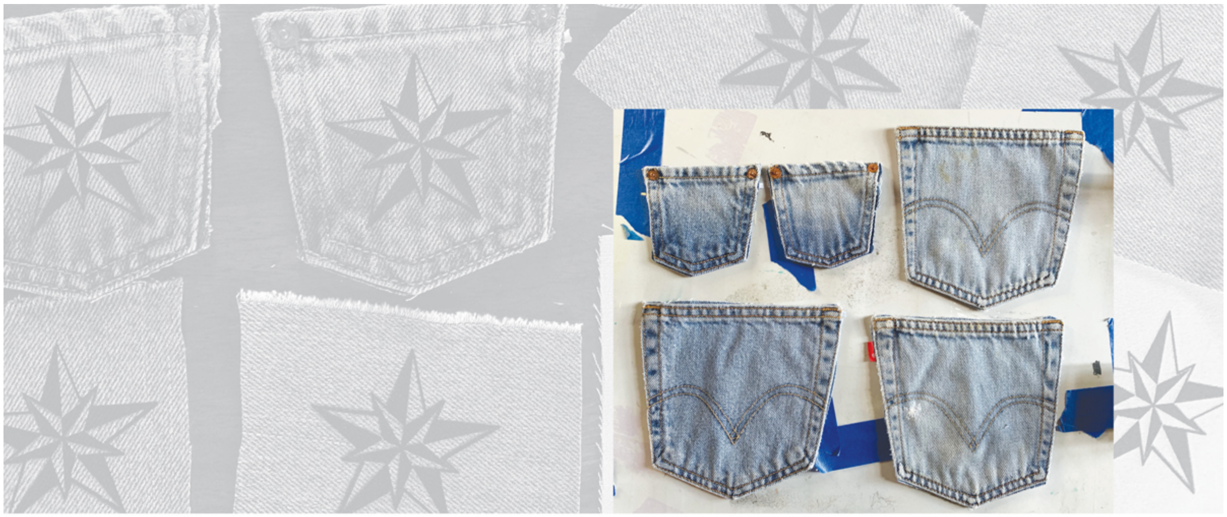


Figure 5.75 *Pockets saved from an old pair of jeans*

Screen Printed Patches

Designing and printing patches is easy and fun. Scrap fabric, upcycled clothing, old sheets, and vintage fabric are all minicanvases waiting to be printed on. Patches are fun to share, collect, sew on to clothing and bags, quilting, or actually use for their intended purpose of covering torn fabric.

Printing patches is the same as for tote bags and other screen printed textiles. You might find it fun to get in the habit of having scrap fabric handy when screen printing other projects. It is a good way to use up leftover ink on the screen.

The star and crow patches (Figure 5.81) use a cut-up pair of old jeans, including the white fabric lining from the pockets. Screen stencil designs are reused from previous projects and printed on patches with fabric ink.

There are two things to look out for when printing on scrap fabric. First, watch for stray threads from frayed unhemmed edges. The threads may come off and get in between the stencil and the patch, leaving a white line in the print. Double-check that all stray threads are removed each time before printing.

Second, when printing on coarse material like denim or canvas, a fabric texture may appear on the screen after printing (Figure 5.80), which will show up on smooth fabric. Make sure you print on a piece of smooth paper to clear out the screen before switching to a different type of fabric.

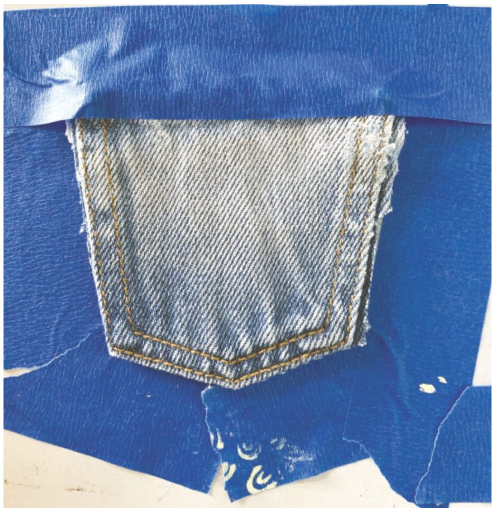


Figure 5.76 *Anything small like these coin pockets should be secured with tape at the top because they tend to slide during the printing process. Additional tape surrounding the pocket creates a template that also helps keep it in place.*

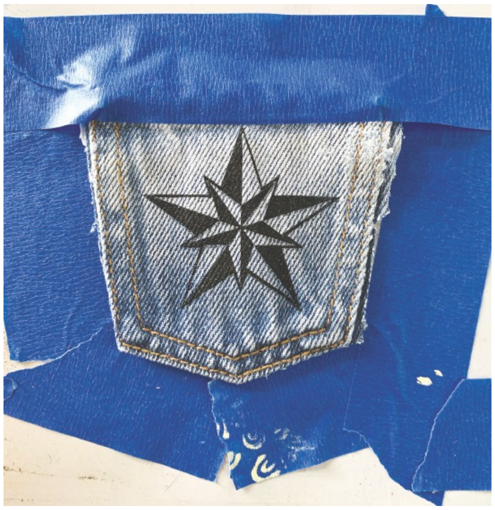


Figure 5.77 *The printed pocket*

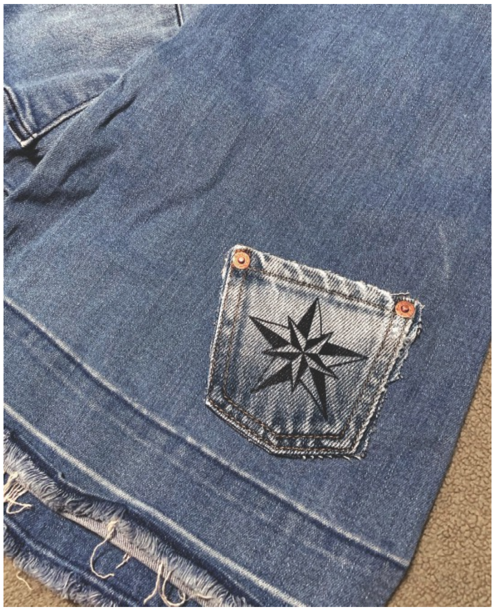


Figure 5.78 *Printed pocket adorns another pair of jeans.*

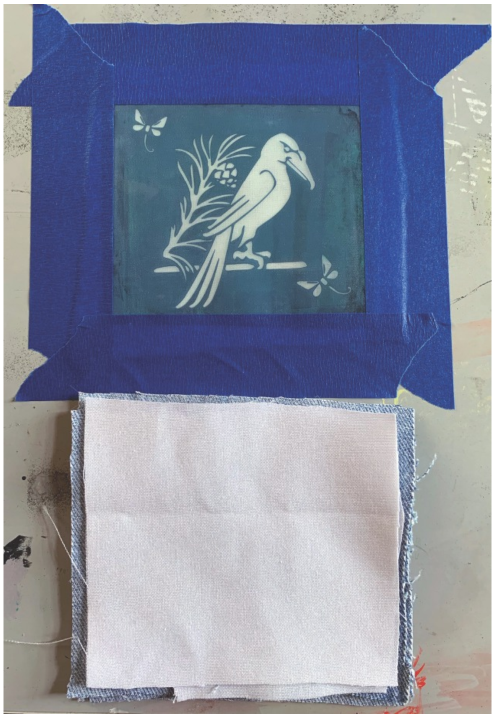


Figure 5.79 *Stencil is taped on cut fabric squares, so nothing moves while printing.*

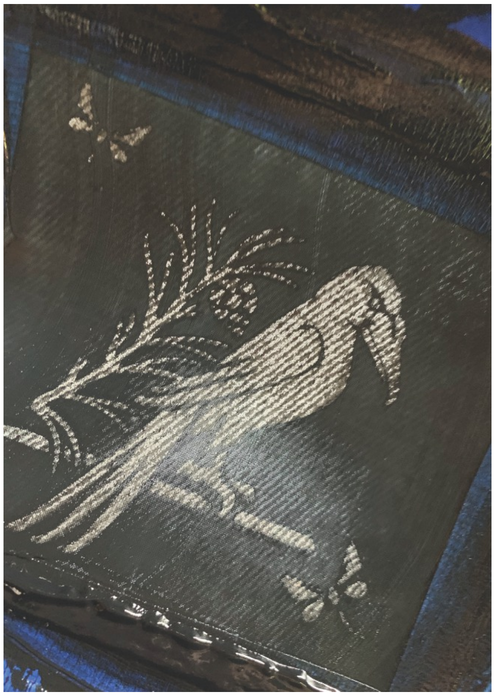


Figure 5.80 *Texture of denim appears in screen after printing.*

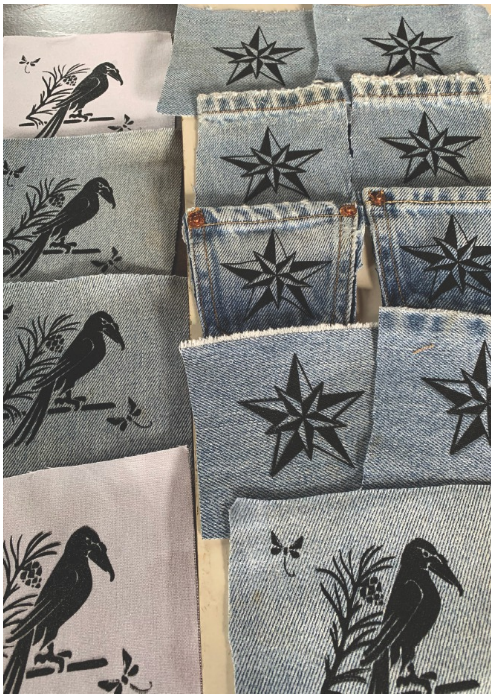


Figure 5.81 *Finished patches*

Easy Two-Color Patches

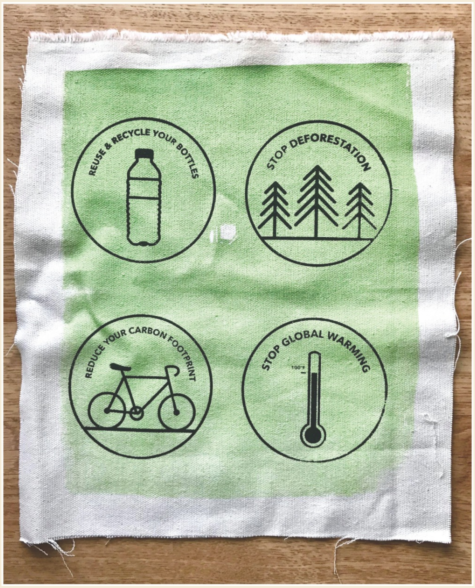

REUSE & RECYCLE YOUR BOTTLES
STOP DEFORESTATION
REDUCE YOUR CARBON FOOTPRINT
STOP GLOBAL WARMING
100°F

Figure 5.82 *A large piece of fabric is used to print multiple stencils, rather than printing one at a time. The green background was printed first simply by masking off a screen. The screen was then burned with the four images spaced far enough apart to cut out after printing.*

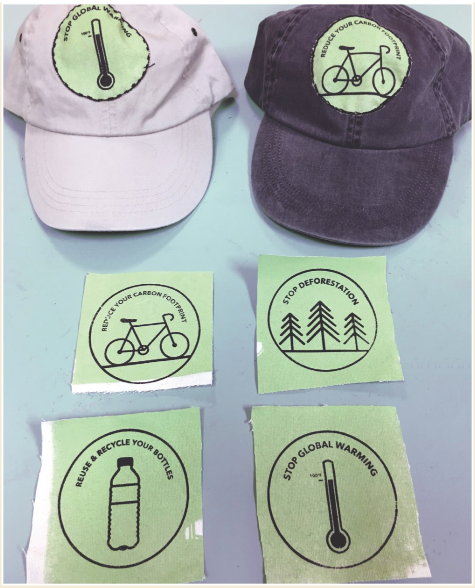

STOP GLOBAL WARMING
REDUCE YOUR CARBON FOOTPRINT
STOP DEFORESTATION
REUSE & RECYCLE YOUR BOTTLES
STOP GLOBAL WARMING
100°

Figure 5.83 *Patches cut apart and hand-stitched on to*

Figure 5.83 *Patches cut apart and hand-stitched on to baseball caps. (Artwork by Samantha Costa)*

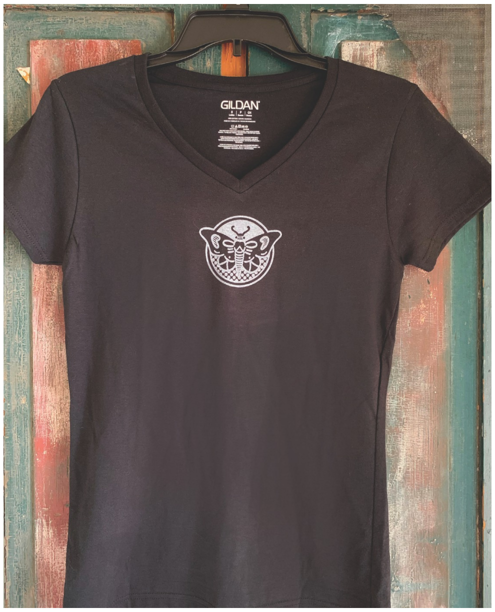


Figure 5.84 *Single-image shirt front*

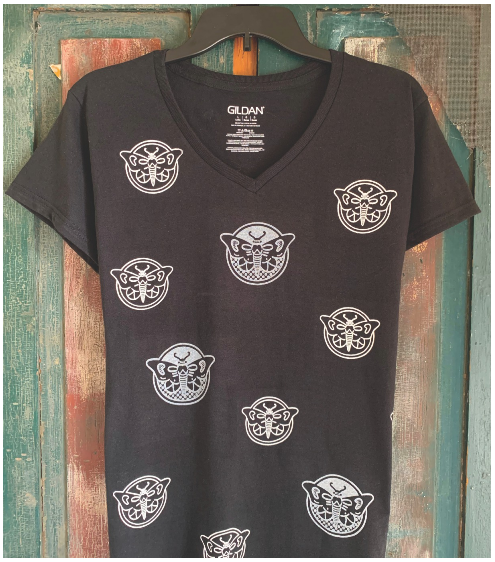


Figure 5.85 *(top) Multi-image, multiprint shirt front*

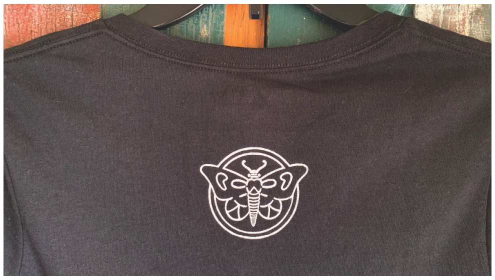


Figure 5.86 *Single-image back for both shirt designs*

Printing T-shirt Designs Front & Back

T-shirt printing is fun and offers limitless options for designs and where to put them, T-shirt colors, and ink colors. This set of shirts will stick to a basic white on black and demonstrate different approaches. For Figure 5.85, two moth designs were used.

The first shirt, Figure 5.84, is a straightforward print centered on the front using art of a larger moth. A smaller moth was printed on the upper back. (Figure 5.86) The second shirt, Figure 5.85, also has the small moth on the back but uses an allover pattern of the large and small moth designs on the front.

- EZ stencils are used to print the shirts and are especially handy for patterns because they are easy to position. (Figures 5.87–5.90)
- Because white can look gray when printed on black, apply at least three to four passes with the squeegee to ensure an opaque white. Two passes will yield a nice print, but it will look gray in comparison. Figure 5.93 displays the difference in values, which, in this case, was intentional to create variety.
- Follow the same screen printing process as with previous projects. It does not matter in which order you print the front and back.
- Because V-neck shirts are used, make sure to place a piece of cardboard or something rigid inside the shirt, so the bump of the neckline does not interfere with printing.
- Use fabric ink, and let cure for at least twenty-four hours before heat-setting.

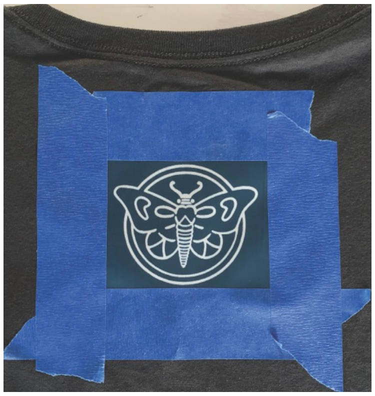


Figure 5.87 *Stencil taped to shirt to hold in place. Use wide tape to protect shirt.*

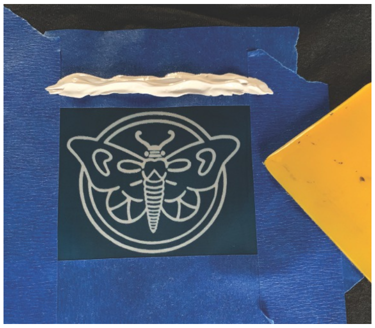


Figure 5.88 *Small amount of ink is placed on tape above stencil. Plastic spreader is used to print.*

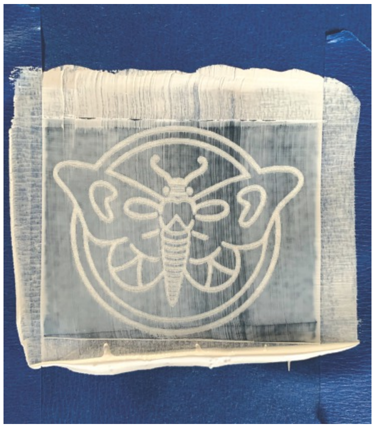


Figure 5.89 *Go over image three to four times to get a solid white.*

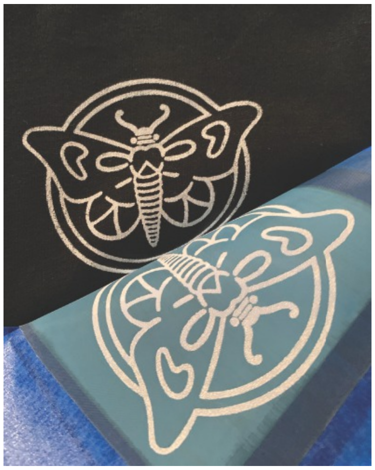


Figure 5.90 *Peel back stencil with tape.*

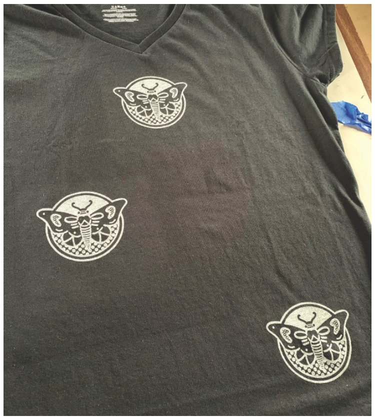


Figure 5.91 *Start of random pattern using larger image.*

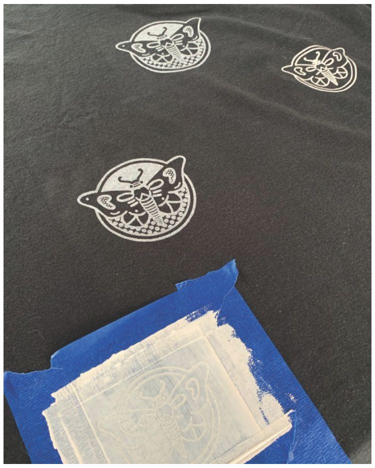


Figure 5.92 *Adding smaller moth. Keep using a tape border if ink gets too close to shirt.*

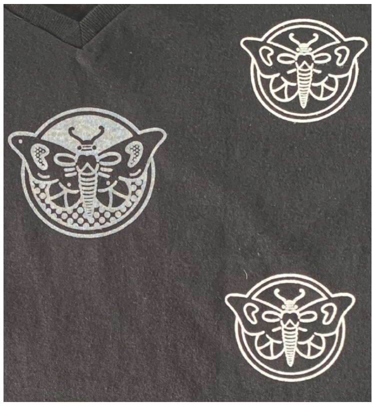
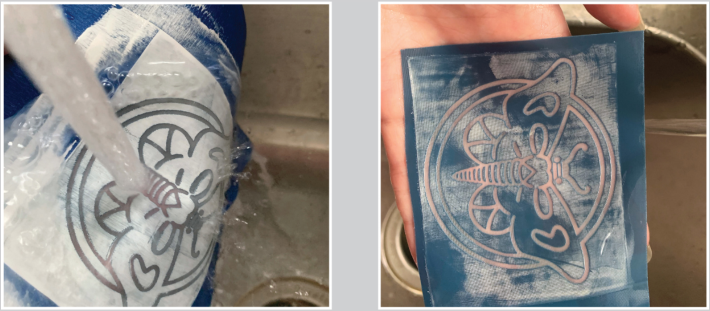


Figure 5.93 *Notice the difference in whites. The lighter white-gray is the result of fewer printing passes.*

EZ Stencil Cleaning: White Ink



Figures 5.94 & 5.95 *Gently wash out the stencil with water. Do not scrub, or you could remove the emulsion. Do not worry if a white-ink residue sticks to the stencil, as long as the stencil is clear in the open areas as shown in Figure 5.96 (far right).*

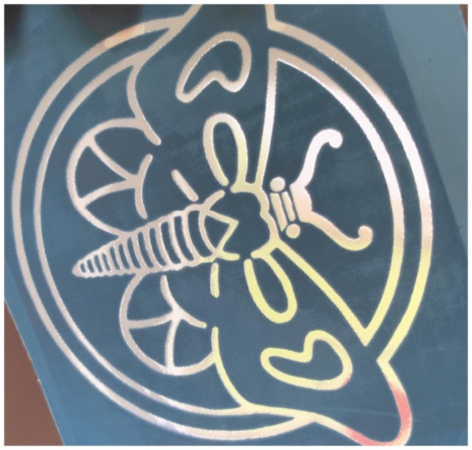


Figure 5.96 *The stencil is held up to the light to check that there are no clogs. This is the same stencil shown with white-ink residue in Figure 5.95.*

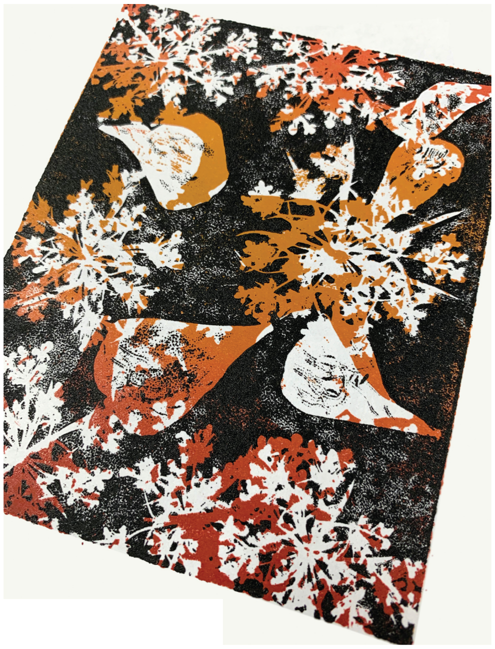


Figure 5.97 *Solarplate print made from a direct exposure, using fresh flowers and then hand-printed twice, once for each color.*

PROJECT 12

Figure 5.98 *Queen Anne's lace*

Solarplate Relief Prints

Solarplate printmaking is a nontoxic, safe, and quick technique that requires only the sun and water. The UV light-sensitive polymer surface backed by a steel plate comes in a variety of sizes and can be cut to size. Solarplates can be exposed by directly placing objects on the plate or by the use of transparency film, such as used with the EZ screen printing stencil.

This project will explore the easy direct exposure method using flowers (Figure 5.98) and the more advanced transparency exposures using a high-contrast photo. (Figure 5.99) Solarplate printing is appropriate for all ages and skill levels, depending on the complexity of the project.

Solarplate printmaking is an exciting process and if you would like to learn more in-depth about it, I recommend *Printmaking in the Sun* by Dan Welden, the inventor of the Solarplate. Although the book was published in 2001, the basic techniques have not changed, with the exception of the digital technologies that now support creating images on transparency film.

Let's get started!

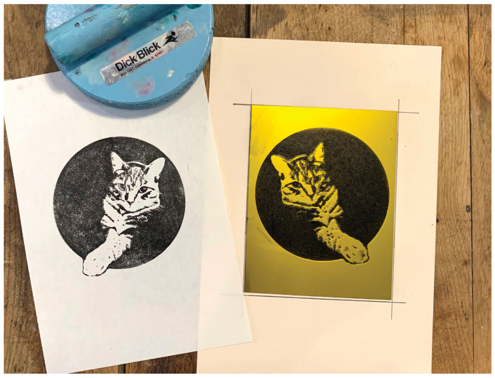


Figure 5.99 *Solarplate print using a high-contrast photograph. The image was exposed from inkjet transparency film.*

Direct Exposure Using Flowers

Gather flowers, petals, leaves, or whatever will look good when flattened in the contact exposure unit. Flowers can be fresh or pressed ahead of time. For this example, Queen Anne's lace, white flowers that look like snowflakes, and a few petals from another flower are used.

Step 1 Prepare to expose the plate with the flowers. (Figure 5.100) Lay out the flowers face down on the acrylic cover from our homemade exposure unit. Make sure they fit whatever size plate you are using. In this case, we are using a 4" x 5" Solarplate. Do this part inside, away from the sun. Even though the plates are light sensitive, you have time to work with them away from sunlight and UV light.

Supplies

- ☐ BTwo to three 4" x 5" Solarplates, depending on number of colors and test plates. Solarplates can be purchased from:
    - Dickblick.com
    - Solarplates.com
    - Graphicchemical.com
- ☐ BPlastic tray and soft brush
- ☐ BTransparency film for inkjet or laser printer
- ☐ BHomemade exposure unit (see pages 36–37 and 119)
- ☐ BPrintmaking paper (thin Japanese style, like Masa)
- ☐ BCharbonnel Aqua Wash ink
- ☐ BBrayers
- ☐ BA bright sunny day

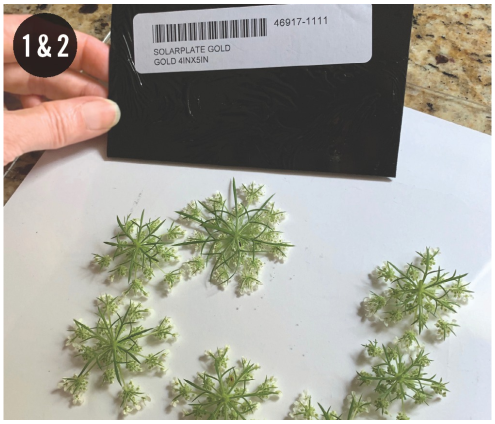


Figure 5.100 *(1 & 2) Arrange flowers face down on the acrylic sheet for the exposure contact unit.*

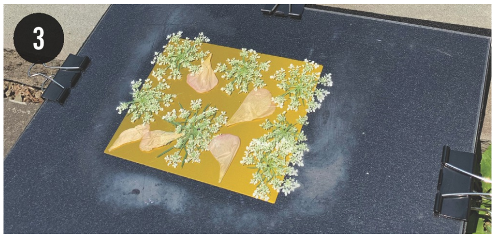


Figure 5.101 *(3) Expose in bright sun using contact unit.*

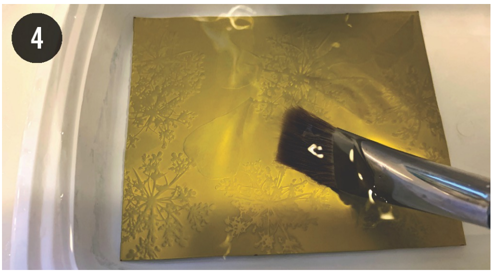


Figure 5.102 *(4) Wash out in lukewarm water. Use a soft brush to help remove emulsion.*

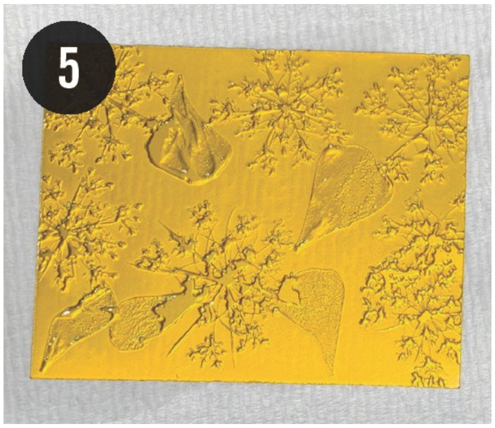


Figure 5.103 *(5) Cure in sun until hardened.*

Step 2 Unwrap the plate from the black plastic, and peel back the clear protective cover to remove it. (Figure 5.100) If you do not take the plastic cover off the plate, it will not expose correctly. Lay the gold light-sensitive side down on the flowers. Cover with the black board, and clamp together with the binder clips.

Step 3 Take outside and expose the plate in full sun. (Figure 5.101) For this exposure it was two minutes and thirty seconds in July at 1:00 p.m. in northeast Pennsylvania, during the height of summer and time of day when the sun is strongest. Depending on where you live and the time of year, the exposure time will differ. Make a test plate to figure out the optimal exposure time. Buy an extra plate just for testing, and cut off a small piece for each test.

Step 4 Remove the flowers, and wash out the plate in a plastic tray of lukewarm water by gently rocking it for a minute or two to get the developing process going. (Figure 5.102) You will see the image start to emerge. Keep water flowing into the tray with a light stream from the faucet. Cool water is fine too. Do not use warm or hot water because it will wash off the plastic in this delicate developing phase.
It may take up to ten minutes to wash off the unexposed

polymer. To help remove it, use a soft brush on the surface of the plate and gently agitate the surface while in the water. You will be able to feel that it is washed out because it is less sticky and the detail areas look clean.

Because the flowers protect the plate from exposure, the unexposed areas wash out during this process. The sun hardens the areas of the plate that are not protected and these hardened areas are what get inked in relief printing. Essentially you will end up with a negative image of the design. (Figure 5.107)

Step 5 The last step in the developing process is to cure the plate. (Figure 5.103) This hardens the polymer into a long-lasting, sturdy plate that withstands printing even on a press.

Gently dab up water with a paper towel and place in the sun for fifteen to thirty minutes. The polymer will feel hard when cured. If it feels sticky, put back in the sun for a longer time.

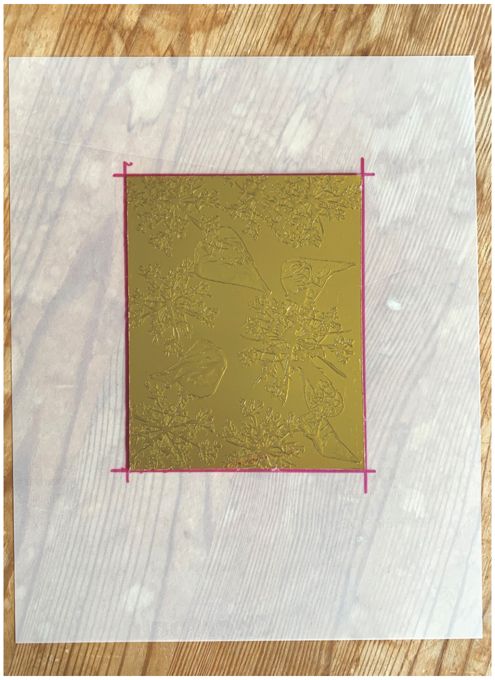


Figure 5.104 *This reusable template for the Solarplate print is made on a sheet of vellum for easy cleanup.*

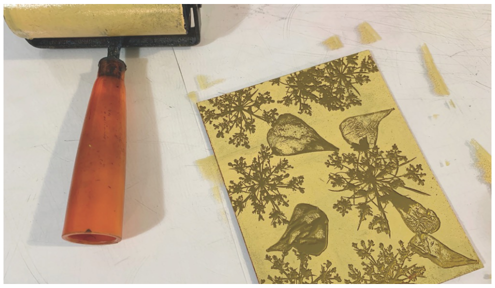


Figure 5.105 *Inked Solarplate*

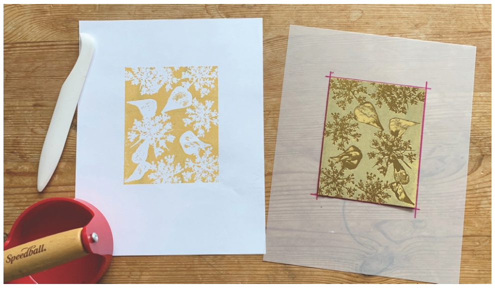


Figure 5.106 *Hand-printed Solarplate using baren and burnisher for small detail areas*

Printing the Plate

For Solarplate printing, use Charbonnel Aqua Wash ink or other oil-based inks because it will yield finer details. This is a relief plate, so as with the other relief projects, use a brayer to roll out enough ink to pull a good print for hand-printing, but not too much ink where it will fill in the details.

Get in the habit of using a template, as shown in Figure 5.104. Mark where the plate goes with a permanent marker. This template is made on a vellum-type film, so it can be washed off and reused. The template and paper size match exactly. This will ensure your plate is printed in the same spot on the paper for each print. The template is important for creating editions and for color registration. We will experiment with printing this plate with other plates and with different colors, so the template is a necessity!

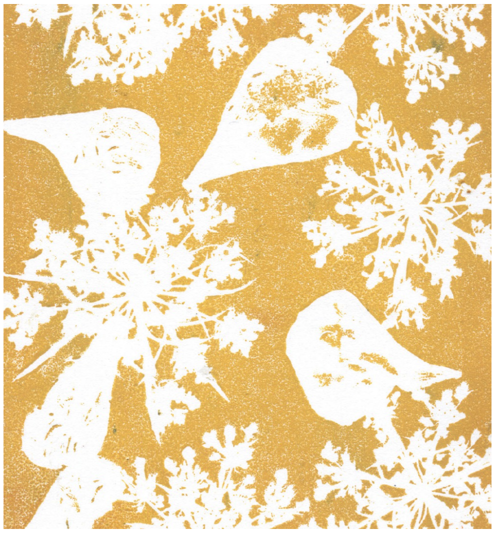


Figure 5.107 *The printed plate reveals a negative image (the background prints, and the flower images are the color of the paper).*

Transparency Exposures

The most important thing to realize when creating relief plates using Solarplates is it is a negative process. In other words, the image needs to be a negative in order for it to print in the positive. Even though the exposing and developing process is similar to screen printing, the difference is screen printing stencils are made in the positive and Solarplates are made in the negative and the image is flipped.

Look at Figures 5.108 and 5.109 and compare the transparencies, the plates, and the final print. If the cat is printed out in the positive like in Figure 5.108, the resulting print is in the negative. Figure 5.109 is opposite, where the film is a negative image of the cat, which ends up in a positive print.

You will need photo editing software to create negatives for your images. The cat was made into a high-contrast image, which dropped all gray values, avoiding extra steps needed to shoot a photographic plate. See the last page of this chapter for a discussion on exposing photographs.

Exposing transparency film on a Solarplate is exactly the same process as detailed on pages 131–133 for direct exposure.

1. Place transparency on a Solarplate, making sure the protective cover is removed from the plate.
2. Secure in exposure unit and take outside. Expose only on a bright sunny day, not too early in the morning or too late in the afternoon. (Figure 5.111)
3. Wash out the plate in lukewarm water for up to ten minutes. (Figure 5.112)
4. Cure in the sun for up to thirty minutes. (Figure 5.113)

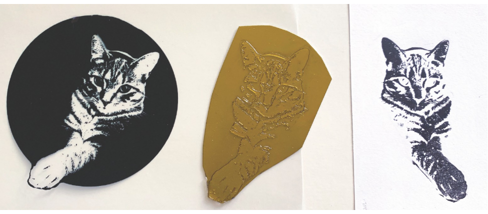


Figure 5.108 *A positive transparency yields a negative print. (Note the background circle was cut away with metal shears as a later design choice.)*

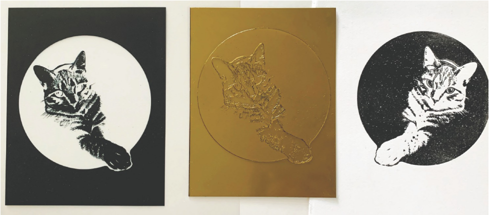


Figure 5.109 *A negative transparency yields a positive print.*

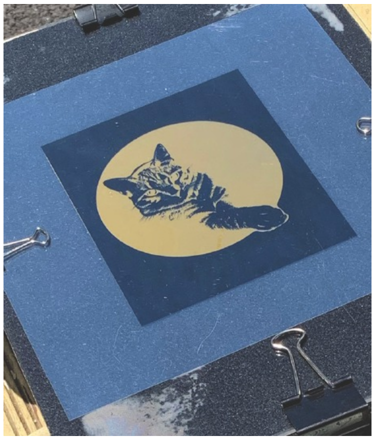


Figure 5.110 *Expose the plate on a sunny day during peak hours. Use your test exposure times to determine how long.*

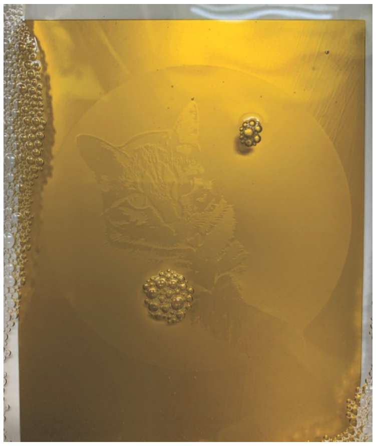


Figure 5.111 *Image begins to emerge within the first minute or so in the water.*

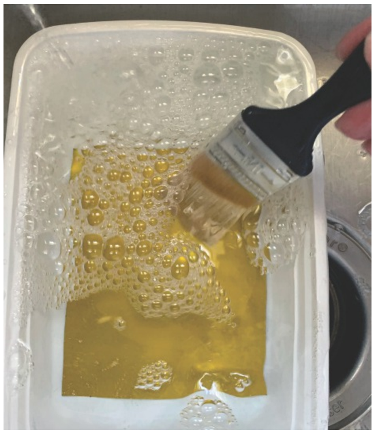


Figure 5.112 *Use a soft brush to agitate the surface and remove polymer from the plate.*

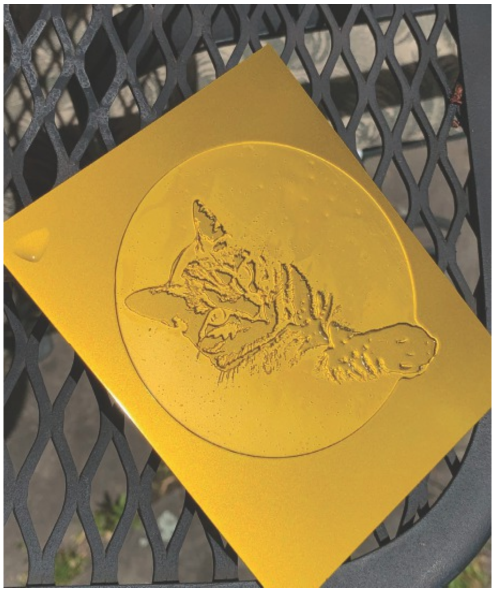


Figure 5.113 *Cure the plate in the sun until hardened.*

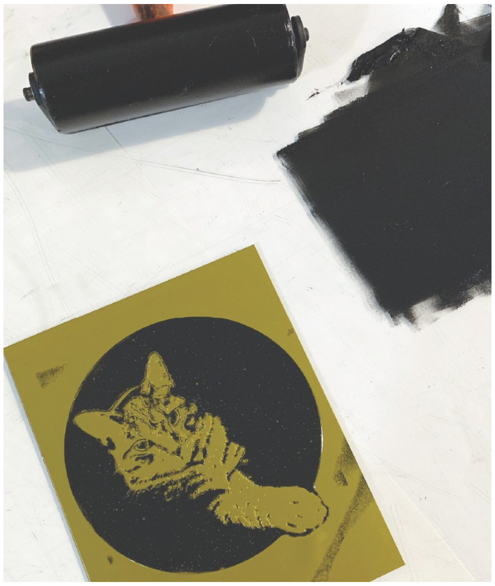


Figure 5.114 *If ink gets in a nonprinting area on the plate, carefully wipe off with a soft towel or baby wipe.*

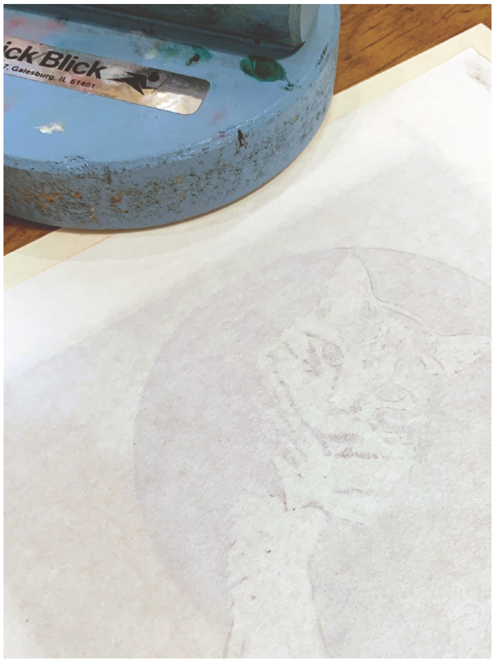


Figure 5.115 *Because this is a small plate with detailed areas, two types of burnishing tools are useful. A baren works as an initial pass to get most of the ink transferred.*

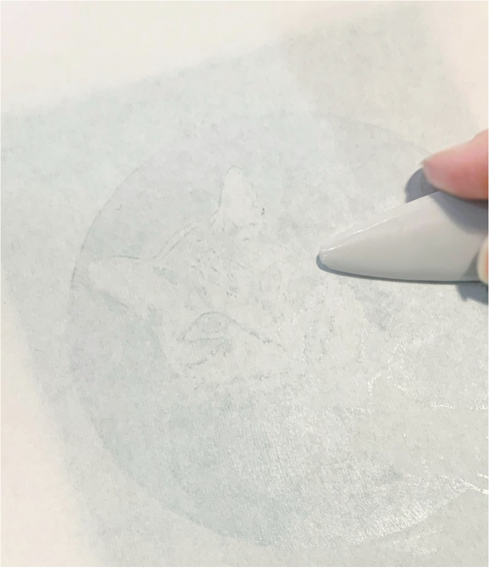


Figure 5.116 *Follow up with a small burnishing tool to selectively apply pressure into the fine areas. Use the side of the tool to burnish so as not to poke through the paper with the tip.*

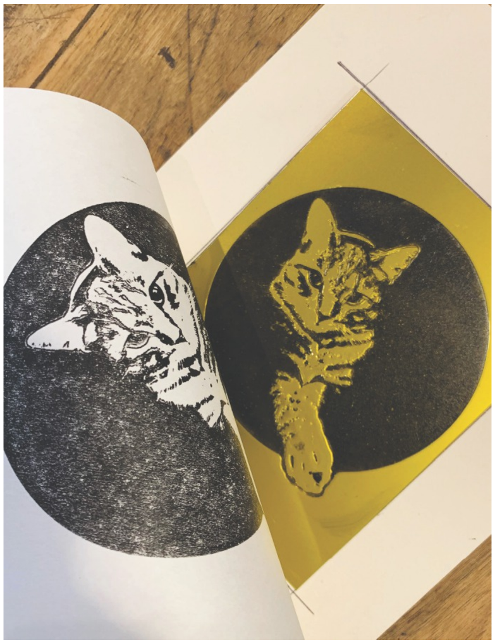


Figure 5.117 *Check print quality by partially peeling back the paper. If it is not dark enough, place back down and burnish more. If it still does not print solid, add more ink and try another print.*

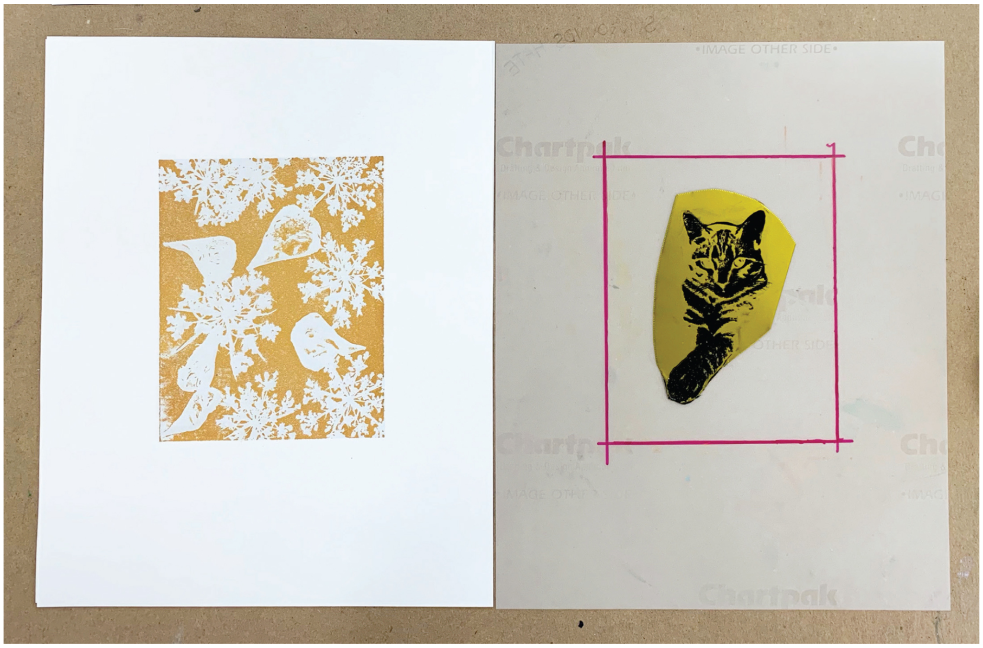


Figure 5.118 *Template with black plate ready to print on flower background print*

Exploring Multiple-Plate Printing

Now that we have three Solarplates exposed that are all the same size, opportunities exist to explore color and plate combinations. For the prints featured in Figure 5.123, the flower plate is printed with light colors for the background, followed by a black overprint from the same flower plate and the cat plates.

Two-Color Cat Print Process

- Using the same template for the flower print, the inked cat plate is positioned in the center. The flower print is then placed over the template and printed, resulting in a two-color print. (Figure 5.119) The cat in the circle also was test printed, but it was not as successful visually.

Multiple-Color Flower Print Process

- The flower plate using a blended roll of red to yellow is printed four times for proofing purposes. (Figure 5.120)

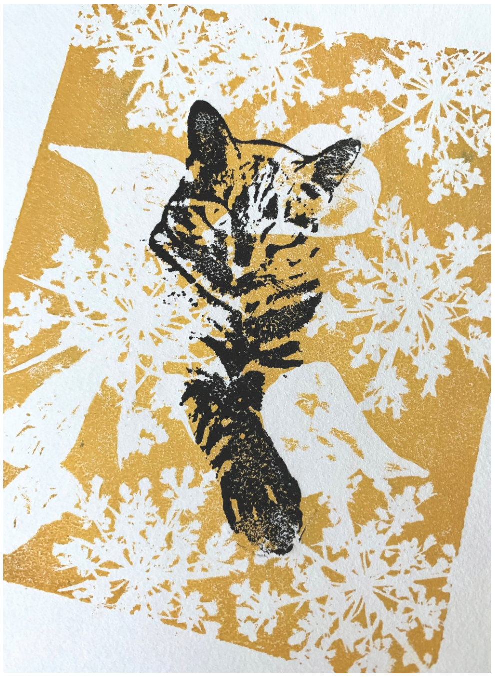


Figure 5.119 *Two-plate artist proof registered with template*

- The flower plate is cleaned off, dried, and then inked with black. The plate is placed upside down on the template and printed on the blended-roll flower print. The results are shown in Figure 5.97 (on page 130) and Figure 5.123 (below).

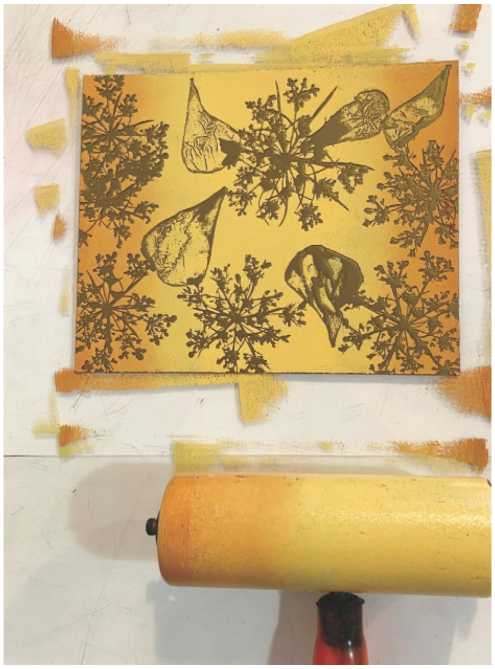


Figure 5.120 *Blended roll of red to yellow on plate ready to print*

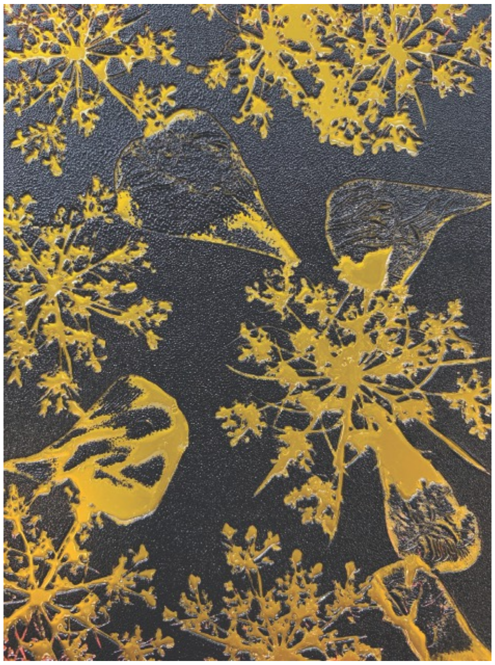


Figure 5.121 *Same flower plate now inked with black*

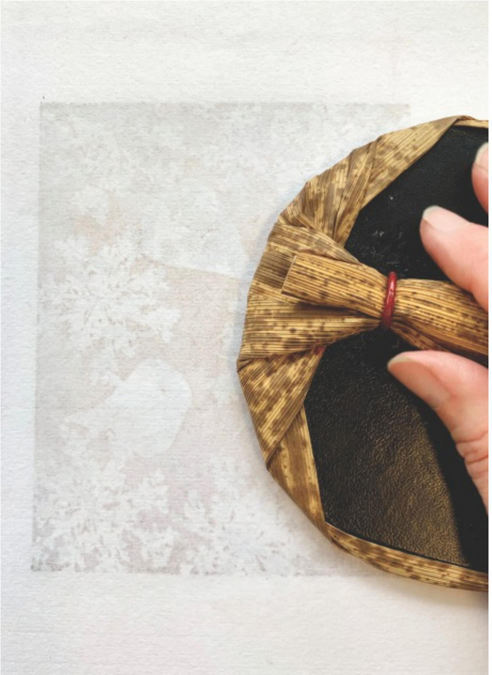


Figure 5.122 *Printing black plate upside down on color flower plate*

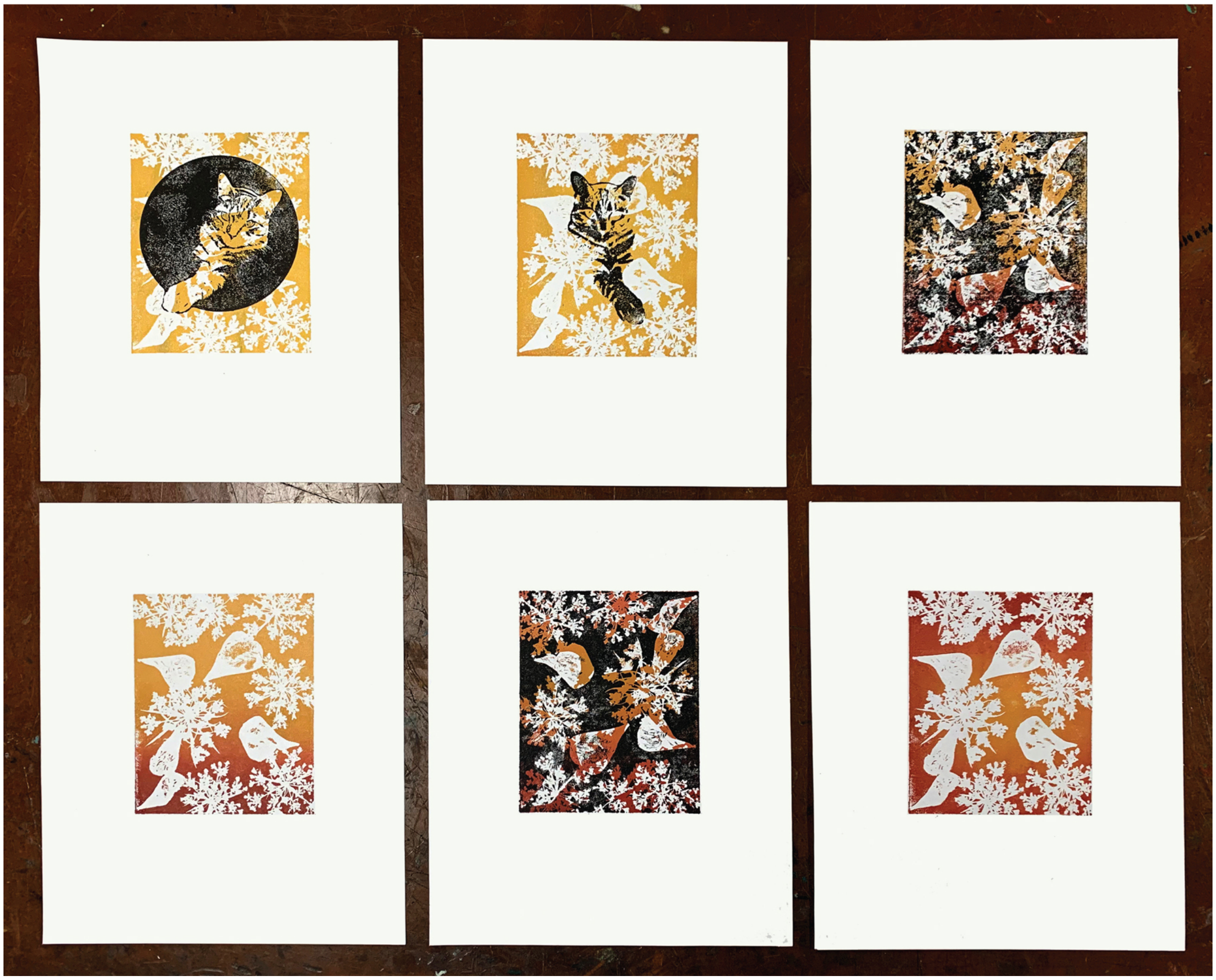


Figure 5.123 *Artist proofs showing an exploration of plate combinations and colors.*

Advanced Solarplates: Etching, Photographs, and Halftones

In addition to being a relief process, Solarplates can be used as an intaglio plate. An intaglio plate, also called “etching,” is printed by pushing the ink into it, rather than rolling over the surface.

As an etching, Solarplates allow large solid areas, subtle grays, and photographs to be reproduced. (Figure 5.124) This requires a double exposure process using a dot screen and takes extra research into halftones, along with an additional step or two in preparing and exposing an image.

If you look closely at Figure 5.126, note how the Solarplate print is made up of small halftone dots. In printmaking, it is called an “aquatint screen” and achieves the same end result.

For this cat print, a halftone dot pattern is used in order to reproduce the big solid areas of black and the orange background.

This halftone process goes beyond the scope of this book, but if you would like to learn more about how to reproduce photographs on a Solarplate, visit Solarplates.com.

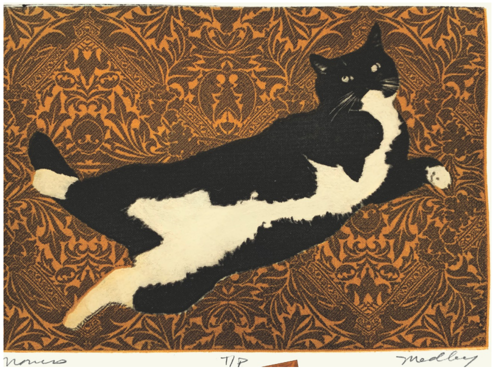


Figure 5.124 *(above) The image for this two-color print made from Solarplates uses a halftone/ aquatint process in order to print big solid areas for the black cat, the orange background, and the gray pattern.*

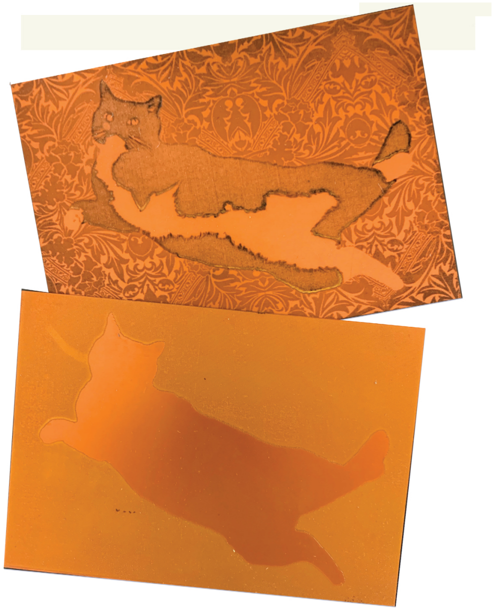


Figure 5.125 *These are the two Solarplates used for the above print (Figure 5.124). The top plate with the cat and the pattern is printed in black. Because it is a halftone, the background was able to be printed as a gray value while the cat printed solid black.*

The second plate is a simple solid halftone with the cat silhouette knocked out so only the orange prints behind the pattern area.

Photo editing software was used to create the images and color separation.

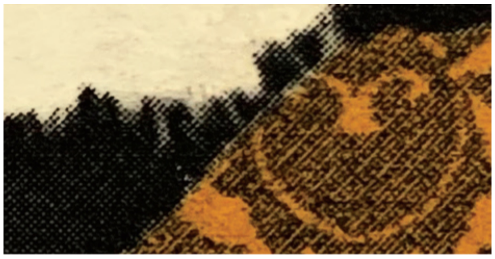


Figure 5.126 *Detail of print showing halftone dots*

ABOUT THE AUTHOR

Christine Medley has worked as a graphic designer and educator for over twenty-five years and has been a printmaker since the 1980s, when she took her first printmaking class. Originally from Omaha, Nebraska, she has followed a family tradition of letterpress printing. Her grandfather owned Omaha Typesetting until the early 1970s, and now she is the owner and operator of the Workshop (www.crowdesigns.com), a community letterpress and graphic design studio in Scranton, Pennsylvania.

Medley's love of type, design, and printmaking evolved into a natural combination of designing with traditional wood and metal type, along with her computer. The projects featured in this book were created primarily at the Workshop, but also at Marywood University's printmaking studio, on her dining room table, and in her driveway and garage, proving that printmaking can happen anywhere and without the use of a press.

Medley is an associate professor of graphic design and printmaking at Marywood, and her work has garnered awards nationwide. Recent exhibits of her relief printing, letterpress, book arts, textiles, animation, and collage have been showcased in ten states around the country. She is a member of the American Institute of Graphic Arts (AIGA), Ladies of Letterpress, Mid-Atlantic Print Council, and the Southern Graphics Council International.

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